

March 1979 Volume XX, No. 3

REHABILITATION INTERVIEW

National Society for
Crippled Children and Adults

Review Articles

Book Reviews

Digests

Abstracts

Events and Comments

Rehabilitation Literature is intended for use by professional personnel and students in all disciplines concerned with rehabilitation of the handicapped. It is dedicated to the advancement of knowledge and skills and to the encouragement of cooperative efforts by professional members of the rehabilitation team. Goals are to promote communication among workers and to alert each to the literature on development and progress both in his own area of responsibility and in related areas.

As a reviewing and abstracting journal, *Rehabilitation Literature* identifies and describes current books, pamphlets, and periodical articles pertaining to the care, welfare, education, and employment of handicapped children and adults. The selection of publications listed and their contents as reported is for record and reference only and does not constitute an endorsement or advocacy of use by the National Society for Crippled Children and Adults.

The National Society for Crippled Children and Adults does not stock for sale publications indexed in *Rehabilitation Literature*. List prices and addresses of publishers are given for information only. Copies should be obtained directly from the publisher or through local bookstores. Known addresses of authors of periodical articles follow their names.

Books for review and correspondence relating to feature articles and other editorial matters should be addressed to the editor. He will welcome your suggestions.

REHABILITATION LITERATURE

CONTENTS

March, 1959, Volume 20, No. 3

	Page
Review of the Month	67
Recent Advances in Cerebral Palsy, edited by R. S. Illingworth, M.D. Reviewed by: Eric Denhoff, M.D.	
Other Books Reviewed	70
Digests of the Month	72
Cerebral Palsy in Children, by Sven Brandt, M.D. In: <i>Modern Prosthetics: A Report on the First International Prosthetics Course, Copenhagen, Denmark, August 1-10, 1957, p. 59-69</i> Published by: International Society for the Welfare of Cripples	
Minnesota Studies in Vocational Rehabilitation: VI. <i>A Survey of the Physically Handicapped in Minnesota</i> Published by: Industrial Relations Center, University of Minnesota	
Some Social Factors in Job Placement and Community Life of the Handicapped as Seen in Several Settings and Services in Relation to Long Island Industry: <i>Final Report of the Three-Year Study</i> Published by: Adelphi College	
Workshops for the Disabled in California, by Nathan Nelson Published by: Vocational Rehabilitation Service, State Department of Education, Sacramento, Calif.	
Events and Comments	77, 96
Abstracts of Current Literature	78
Legislation	94
Author Index	Inside back cover

Earl C. Graham, Editor
Published Monthly by
National Society for Crippled Children and Adults, Inc.
2023 West Ogden Avenue, Chicago 12, Illinois
Dean W. Roberts, M.D., Executive Director
Subscription rates: \$4.50 a year, United States; \$5.00 a
year, other countries. Single copy: 50c, United States;
60c, other countries.

Address changes must be received by the 10th of the
month to take effect the following month.

Second class postage paid at Chicago, Illinois.

Copyright 1959 by the National Society for Crippled
Children and Adults, Inc., Chicago.

Directory of International Nongovernmental Organizations Interested in the Handicapped

The Conference of World Organizations Interested in the Handicapped was formed in 1953 to assist the United Nations and its specialized agencies in the development of a well-coordinated international rehabilitation program. Detailed information concerning these organizations may be obtained from a *Compendium on the Activities of World Organizations Interested in the Handicapped*, issued in 1958 by the World Rehabilitation Fund and distributed in the United States by the International Society for the Welfare of Cripples, 701 First Avenue, New York 17, N.Y. (\$2.00). Donald V. Wilson, Secretary-General of the International Society, is Conference Chairman. Members and Associate Members of the Conference are listed below. The U.S. representative is given in italics following the name and address of the international agency.

American Foundation for Overseas Blind
22 W. 17th St.

New York 11, N. Y.
Mr. M. Robert Barnett
22 W. 17th St.
New York 11, N. Y.

Boy Scouts International Bureau
77 Metcalfe St.

Ottawa, Ontario, Canada
Mr. Harry K. Eby
Boy Scouts of America
New Brunswick, N. J.

Catholic International Union for Social
Service

III, Rue de la Poste
Brussels, Belgium
Mrs. Carmen Giroux
Vineyard Lane
Greenwich, Conn.

Chamber of Commerce of the U.S.A.
1615 H St., N.W.

Washington 6, D. C.
Mr. Earl F. Cruickshank
711 Third Ave.
New York 17, N. Y.

International Association for the Prevention
of Blindness

47, Rue de Bellechasse
Paris 7e, France
Dr. Franklin M. Foote
% Natl. Soc. for the Prevention of
Blindness
1790 Broadway
New York 19, N. Y.

International Catholic Child Bureau
31, Rue de Fleurus

Paris 6e, France
Rev. William F. Jenks
% Natl. Catholic Educational Assn.
1785 Massachusetts Ave.
Washington, D. C.

International College of Surgeons
1516 Lake Shore Dr.

Chicago 10, Ill.
Ross T. McIntire, M.D.
Executive Director, Internatl. Coll. of
Surgeons
1516 Lake Shore Dr.
Chicago 10, Ill.

International Committee of Free Trade
Unions

24, Rue du Lombard
Brussels, Belgium
Mr. William Kemsley
20 W. 40th St.
New York 18, N. Y.

International Conference of Social Work
345 E. 46th St.

New York 17, N. Y.
Miss Ruth M. Williams
345 E. 46th St.
New York 17, N. Y.

International Council of Nurses
1, Dean Trench St., Westminster

London, S.W. 1, England
Miss Annabelle Petersen
3146 Patterson St., N.W.
Washington 15, D. C.

International Hospital Federation
6th Floor, 34 King St.

London, E.C. 2, England
Dr. E. M. Bluestone
International Hospital Federation
3725 Henry Hudson Parkway West
New York 63, N. Y.

International Poliomyelitis Congress
301 E. 42nd St.

New York 17, N. Y.
Morton A. Seidenfeld, Ph.D.
301 E. 42nd St.
New York 17, N. Y.

International Society for the Welfare of
Cripples

701 First Ave.
New York 17, N. Y.
Mr. Donald V. Wilson
701 First Ave.
New York 17, N. Y.

International Union Against Tuberculosis
15, Rue Pomereu

Paris 16e, France
Mrs. Antoinette L. Dunn
Natl. Tuberculosis Assn.
1790 Broadway
New York 19, N. Y.

International Union for Child Welfare
1, Rue de Varembe

Geneva, Switzerland
Assn. for the Aid of Crippled Children
345 E. 46th St.
New York 17, N. Y.

League of Red Cross Societies
40 Rue du XXXI Decembre

Geneva, Switzerland
Mrs. Samuel Krakow
American National Red Cross
17th and D Sts., N.W.
Washington 13, D. C.

World Association of Girl Guides and
Girl Scouts

132 Ebury St., Westminster
London, S.W. 1, England

Miss Marian F. Weller

830 Third Ave.
New York 22, N. Y.

World Confederation for Physical Therapy
% Chartered Society for Physiotherapy
Tavistock House (South)
Tavistock Sq.

London, W.C. 1, England
Miss Mildred Elson
142 Montvale Ave.
Woburn, Mass.

World Council for the Welfare of the
Blind

14 Rue Daru
Paris 8, France
Mr. Erick T. Boulter
22 W. 17th St.
New York 11, N. Y.

World Federation for Mental Health
19 Manchester St.

London, W. 1, England
Mrs. Charles S. Ascher
838 West End Ave.
New York 25, N. Y.

World Federation of Occupational
Therapists

% L.S.O.T., Victoria Rd.
Huyton, Nr. Liverpool, England
Miss Clare S. Spackman
354 W. Allen Lane
Philadelphia 19, Pa.

World Federation of Trade Unions
Janska 100

Prague, Czechoslovakia
Miss Elinor Kahn
Apt. 1-D North
2 Tudor City Pl.
New York 2, N. Y.

World Veterans Federation
16, Rue Hamelin

Paris 16, France
Col. George E. Arneman
Crescent Dr.
Roslyn, N. Y.

United Nations and Specialized Agencies
at United Nations Bldg., New York, N. Y.

U.N. Bureau of Social Affairs
Mr. Kurt Jansson, Room 2741

UNESCO
Miss Mary Proctor, Room 2208

UNICEF
Mrs. Grace Holmes Barbey, Room 2100

World Health Organization
Palais des Nations
Geneva, Switzerland
Rodolphe L. Coigney, M.D., Room 2241D

U.N. High Commission for Refugees
Palais des Nations

Geneva, Switzerland
Miss Aline Cohn, Room 3268B

U.N. Technical Assistance Board
Palais des Nations

Geneva, Switzerland
Mr. David Owen, Room 2963A
United Nations NGO Section, ECOSOC
19, Avenue Kleber
Paris 16e, France

Mr. Harles Hogan, Chief, NGO Section,
Room 2941C

International Labour Organization
Geneva, Switzerland

Dr. R. A. Metall
Director of the Liaison Office with
United Nations
345 E. 46th St.
New York 17, N. Y.

REHABILITATION LITERATURE

Review of the Month

Recent Advances in Cerebral Palsy

Edited by R. S. Illingworth, M. D.

*Published by Little, Brown and Company, 34 Beacon St.,
Boston 6, Mass. 1958. 389 p. illus., tabs. \$12.00*

Reviewed by Eric Denhoff, M.D.

About the Editor . . .

The editor and chief contributor to this book is Professor of Child Health, University of Sheffield, and Consulting Paediatrician of The Children's Hospital, Sheffield, and the United Sheffield Hospitals. The books and medical articles that Dr. Illingworth has written reflect his interest in all handicapped and ill children, especially as relating to their stay in hospitals. He is a member of the Consultative Research Committee of The National Spastics Society in England.

About the Reviewer . . .

Well known for his own research in the treatment of cerebral palsy, Dr. Denhoff has lectured frequently before medical and lay groups and is author of many published papers. He was Chairman of the Research Committee, American Academy for Cerebral Palsy, 1950-1955, and is currently a member of the Executive Committee of the Academy. Specializing in pediatrics, he has been since 1947 Medical Director of the Meeting Street School for Children's Rehabilitation in Providence, Rhode Island.

I enjoyed reading *Recent Advances in Cerebral Palsy* by R. S. Illingworth, although I was disappointed in it because its title is misleading. I had a strong feeling that "I'd heard that tune before"—words and music changed but little from the old masters. The editor, when he wrote as a pediatrician did himself proud, since he has keen insight and a good concept of the problem and he describes it well. He does not hedge and puts his opinions clearly on the line. This I enjoyed. However, when the editor "edited," he failed to interweave the material written by his team of experts. Thus, the book failed to leave an impression that the greatest recent advance in cerebral palsy was the recognition that successful adjustment of the handicapped child was directly related to fulfilling the total needs of child and family, at each developmental plateau through unpredictable combinations of physical and psychological technics. I was disappointed also because the author fell into a commercial pitfall of trying to write at a level for everybody concerned in treatment of cerebral palsy. This cannot be done. He prefaces his book by stating he makes no pretense of trying to write a complete textbook on cerebral palsy but is merely trying to present an up-to-date review of certain important aspects of the subject. If his book had been called "an up-to-date review of certain important aspects of cerebral palsy," it would have been a job well done. As it is, he fails to discuss adequately some of the exciting recent basic research advances in neurophysiology, electroencephalography, neuropharmacology, neuroanatomy, and neurochemistry as they are related to the clinical practice of cerebral palsy.

BOOK REVIEWS

A discussion of certain segments of the book will give the reader an idea of the book's content. Comments will bring out applause or negation.

Pediatric Areas

Chapter 1. The Classification, Incidence and Causation, by R. S. Illingworth

Chapter 3. Early Diagnosis and Differential Diagnosis, by R. S. Illingworth

Chapter 4. The Handicaps of the Child with Cerebral Palsy, by R. S. Illingworth

Chapter 11. Drug Therapy of Cerebral Palsy, by M. A. Perlstein.

The chapters contributed by Illingworth were sound except in a few instances. He points out well the difficulties of attaching too much significance to retrospective data and emphasizes that it is difficult, at this stage of our knowledge, to give positive opinions about effects when we are still not certain of the causes. The discussion of early diagnosis and differential diagnosis was superb, bearing out the fact that the author is a clinician with keen insight and good observation and has a good concept of "what is" and "what isn't" cerebral palsy. However, it was at Chapter 4 that my fondness for the author's forthright opinions reversed itself. In discussing the available standard data on IQ ratings he failed to emphasize that a recent advance has been the acknowledgement by competent psychologists that any test that is utilized as a static instrument will have little validation in many individuals with difficult cases of cerebral palsy. Rather, psychological assessment of many of these children in a longitudinal situation (*i.e.*, a nursery school with built-in testing situations that a child may attend for two to three months) should be done before psychometric data are considered valid. In the discussions, there should be a closer interweaving of the topic of convulsions in this chapter with those of other chapters—drug therapy, psychological problems, and neurosurgical advances. Convulsions and its sequellae of hyperkinetic behavior disorder and emotional problems are a major problem in adjustment in cerebral palsy. Tying this together in one bundle has been a recent advance in treating cerebral palsy. The author uses but four lines regarding distractibility and defective concentration, which he lays to mental deficiency rather than to hypothalamic dysfunction!

Similarly, in the sections on vision, hearing, and sensory handicaps, the author uses a light touch rather than digging below the surface and pointing out the tremendous gaps of information in the sensory-perceptual (visual motor) areas and that research being done in experimental psychology needs conversion to clinical practice.

The chapter by Perlstein on drug therapy should have epitomized the book title, but Perlstein, who knows more about drug therapy in cerebral palsy than anyone else, did not even bother with a bibliography. He could have dis-

cussed with ease the newer knowledge of drug effects on the diencephalon, the cortex, and reticular pathways.

Communication Problems

Chapter 5. Diagnosis and Educational Treatment of Deafness in Cerebral Palsy, by A. W. G. Ewing

Chapter 13. Speech Therapy: Treatment by Relaxation, by Ina K. Noton and Suzanne M. Vincent

As usual, these two chapters dealing with hearing seemed good to this pediatrician, who is always impressed

A Comment on

What We Know About Cerebral Palsy

"...ONE MAJOR FACT STANDS OUT—how very little is known about cerebral palsy; not only about the fundamental questions of causes and prevention but about the significance and value of the work being done. There is no agreement on nomenclature or classification; there are deep and bitter divisions about the principles and methods of treatment and management; and progress is inhibited because it has so far proved impossible to find any generally acceptable basis for the comparison and assessment of results. But dissension is perhaps better than apathy and is after all only one of the results of the widespread interest and concern which cerebral palsy is now arousing. This interest and the work it engenders is the indispensable foundation from which further progress must come. Nevertheless it remains true that much of the work of doctors, psychologists, therapists and educationists is still experimental. Individual results may be near miraculous or disappointing; the reasons for either can only be guessed at; theories are legion; cause and effect remain to be demonstrated."—*From Annual Report, 1957-1958, British Council for the Welfare of Spastics, 13 Suffolk St., Haymarket, London, S.W. 1, England.*

by the fact that educators of the deaf strike quickly at the core of the problem and seem to solve it by a meticulous, repetitive methodology. Here again, one wonders why the chapter on speech therapy, which seems full of practical suggestions for all levels of handicaps, is separated from the hearing section by over 150 pages. Certainly the chapter on speech therapy demonstrated that a recent advance in the field of communication is to use whatever method, from any of the modalities used in cerebral palsy, can be made to work. One wonders why those in the speech and hearing specialties are still loath to concentrate on group approaches rather than individualized therapy. No bibliography was included in the chapter on speech therapy.

Psychological and Educational Areas

Chapter 6. Psychological Aspects of Cerebral Palsy, by Norah Gibbs

Chapter 7. Intelligence Testing, by F. Eleanor Schonell

Chapter 8. Educational Problems and Methods of Teaching, by F. Eleanor Schonell

In these chapters the book holds to its title. Concepts and methodology discussed in the psychological and educational fields are modern and point to the future. It seems too bad the editor failed to omit his own discussion of the same material in chapter 4. If he had, I would have felt that the pediatrician on the team was well oriented in psychological aspects of cerebral palsy.

Orthopedic and Physical Therapy

Chapter 10. Equipment for the Home, School and Treatment Clinic, by Alexander Innes

Chapter 12. The Role of Physical Therapy in Cerebral Palsy, by Winthrop Morgan Phelps

Chapter 14. Orthopaedic Surgery in the Treatment of Cerebral Palsy, by G. A. Pollock and W. J. W. Sharrard

The chapter on equipment seems to reflect the past rather than the present or future. Today many of us feel that all the special equipment featured in the late 1940's is unnecessary if a medical treatment plan is instigated early and measures that prevent secondary complications, such as contractures, are without hesitation used early where there is need.

Phelps summarizes the role of physical therapy well, but, as usual, he mentions bracing as though it were an obvious adjunctive need. This is an area of dispute and warrants a more detailed discussion.

The review of orthopedic surgery is good and points out the pros and cons of the orthopedic surgery approaches. Here the tendency for an optimistic approach toward surgery in properly selected young cerebral palsied children certainly seems a recent advance, and I am pleased to see it emphasized.

Pathology and Neurosurgery

Chapter 2. Structural Changes in the Brain in Cerebral Palsy, by Cyril B. Courville

Chapter 15. Recent Advances in the Neurosurgery of Cerebral Palsy, by Russell Meyers

The reviewer hopes that Dr. Russ Meyers does not get an inferiority complex because the chapter on pathology was discussed along with his on neurosurgery. This was done as a compliment, since his review emphasizes that recent advances in neurosurgery are based on accurate neuropathological estimation. So far as the chapter on pathology is concerned, there is little question that Courville has contributed a good deal to our understanding of the structural changes in the brain in cerebral palsy. However, one would have hoped that he might have brought into the discussion a few more of the approaches that are needed to clarify further the diversity of pathological and physical findings in cerebral palsy. The entire book should have followed a format like that found in Meyers' chapter on neurosurgery. The only criticism of this chapter, if there is any, would be that Dr. Meyers writes so well that readers not specially trained in the neurosurgical field would have difficulty in understanding some of the points made.

Cerebral Palsy: Voluntary and Tax-Supported Services in the United States

This appendix, prepared by Sherwood A. Messner, was very good, but the reviewer feels that the discussions are somewhat lost and out of place as written. The English groups certainly have excellent philosophies that should have been brought out more strongly. Certainly the problem of development of services as offered by the United Cerebral Palsy Associations is much more complex than as presented by Mr. Messner. He summarizes the work that United Cerebral Palsy has done in this country but has left out some other agencies and facilities whose concepts have contributed to the problem.

Summary

This book is enjoyable, has good facts, and brings us up to the early 1950's in most of the chapters. The greatest criticism is that it was titled incorrectly. Let it be said that the reviewer has the greatest respect for Dr. Illingworth's work. He feels especially qualified to be so critical of this book since he, himself, is publishing a similar book and knows how difficult it is to get the perfect specimen. Next year Dr. Illingworth should have the opportunity to review the reviewer's book!

The April Issue

In the April issue of *Rehabilitation Literature*, the Article of the Month will be "Physical Therapy for Motor Disorders Resulting from Brain Damage," by Sarah Semans, R.P.T. In the Review of the Month, Earl D. McBride, M.D., will discuss the new book *Rehabilitation in Industry*, edited by Donald A. Covalt, M.D.

Other Books Reviewed

182

Cerebral Palsy; A Clinical Study of 370 Cases

By: Marit Skatvedt

1958. 101 p. illus., tabs. Paperbound. Oslo University Press, Oslo, Norway. (Also published as Suppl. no. 111, *Acta Paediatrica*)

Beginning with a brief historical survey of cerebral palsy and an account of various investigations on the frequency of the disease, the author presents a survey of the etiological and clinical conclusions regarding cerebral palsy as based on findings of the study. Data were obtained from results of clinical examination and from case history information provided by parents in regard to family conditions, prenatal and natal conditions, and the later physical condition of the child. Data showed a male predominance of 60 percent as compared to 40 percent for females. The predominance of first-born children is statistically significant. Possible genetic and other prenatal factors responsible for cerebral palsy were considered. Etiological conclusions drawn from study of the data are discussed. Various classification schemes for the clinical types of cerebral palsy are described and the system of classification used in this study defined. Diagnostic and clinical considerations and conclusions drawn from the data comprise the larger portion of the book. Findings from the six autopsies included seem to confirm those of Dr. Perlstein. Bibliography of 88 references.

183

Clinical Orthopaedics, No. 12: Rehabilitation

Edited by: Anthony F. DePalma (editor-in-chief)

1958. 327 p. figs., tabs. (Fall, 1958) J. B. Lippincott Co., E. Washington Sq., Philadelphia 5, Pa. \$7.50.

Section I of this volume contains original monographs by authorities in the field of rehabilitation; Section II includes articles of general interest to the orthopedic surgeon. The third section offers two articles on miscellaneous orthopedic topics.

Contents of Section I: Disability evaluation and the orthopaedic surgeon, Earl D. McBride.—Functional and vocational recovery in severe poliomyelitis, John E. Affeldt (and others).—Overwork weakness in partially denervated skeletal muscle, R. L. Bennett and G. C. Knowlton.—The use of stand-up and step-up exercises in rehabilitation, Gerald G. Hirschberg.—The diagnostic advantages of electromyography in neck and shoulder disorders, Charles A. Furey.—The management of early rheumatoid arthritis by physical means, Leonard F. Bender and Walter J. Treanor.—A review of denervation atrophy with some comment on the results of electric stimulation

in humans and animals, Khalil G. Wakim.—Rehabilitation of the amputee; lower and upper extremities, Henry H. Kessler.—Rehabilitation of the amputee, the hemiplegic and quadriplegic, Earl F. Hoerner.—Perception of verticality in hemiplegic patients in relation to rehabilitation, Jan H. Bruell and Mieczyslaw Peszczyński.—Use and abuse of physical therapy in rehabilitation, John McM. Mennell.—Problems in the rehabilitation of the injured worker and his restoration to gainful employment, Alexander P. Aitken.—The Newington brace for cerebral palsy, Russell V. Fuldner and Josef Rosenberger.—Woodrow Wilson Rehabilitation Center, Roy M. Hoover.

184

A Compendium of Research and Theory on Stuttering

By: Charles F. Diehl

1958. 314 p. tabs. (*Am. Lecture ser., publ. no. 344*) Charles C Thomas, Publisher, 301-327 E. Lawrence Ave., Springfield, Ill. \$9.75.

An objective presentation of 193 abstracts of published articles on research and theoretical aspects of stuttering. References have been organized into related units of study dealing with the history of stuttering, its symptomatology, etiology from both the physiological and psychological viewpoints, and speech therapy for stuttering. As an aid to the student in evaluating the articles as theoretical or experimental, each abstract states the purpose and experimental design of the study and gives a summary of the findings and the conclusions. Additional references totaling 364 are located after each of the five main units of study as well as in the concluding section of the book (general references and selected foreign language references). Teachers, physicians, therapists, psychologists, and students will find this well-organized book of value in locating the literature pertinent to their problems.

185

Neurological and Psychological Deficits of Asphyxia Neonatorum, with Consideration of Use of Primates for Experimental Investigations

Edited by: William F. Windle (28 contributors)

1958. 336 p. figs., tabs. (*Natl. Inst. of Neurological Diseases and Blindness: Symposia in Neurology*) Charles C Thomas, Publisher, 301-327 E. Lawrence Ave., Springfield, Ill. \$8.00.

Keynote papers delivered at a Conference on Asphyxia Neonatorum, Brain Damage, and Impairment of Learning, held at the University of Puerto Rico in 1956, comprise the chapters of this monograph, which are supplemented by revised and amplified round table discussions on the

topics of the chapters. A special feature of the book is a discussion of the use of experimental animals (primates) for investigations in this area of research. As a whole it offers a critical review of the interrelationship of asphyxia neonatorum, cerebral palsy, and mental retardation and of the present status of the problem. Retrospective and prospective clinical studies are thoroughly covered with a comprehensive bibliography (p. 291-325).

186

Second Annual Report: Evaluation of the Potential for Vocational Rehabilitation of Mentally Retarded Youths with Muscular, Orthopedic, and Emotional Impairments

By: **The Sheltered Workshop of MacDonald Training Center, Tampa, Florida** (Robert G. Ferguson, Project Research Director)

1958. 162, 27 p. Mimeo. (SP-50, rev. U.S. Off. of Voc. Rehab.) Looseleaf. Paperbound.

A preliminary report of data primarily based on a study of the Workshop's clients during the past two years, it is intended as a descriptive review of some of their characteristics, employment and placement reports, the development of vocational success data, and the exploration of the relationships among the reported data for the purpose of developing vocational prediction indices. Administrative problems and procedural technics have purposely been omitted from the current report, which supplements the 1957 report. The Training Center plans to revise the 1957 report and make it available for distribution. Still another report to be issued April 30, 1959, will reflect the predictive value of these and additional data for vocational habilitation. A section of the *Second Annual Report* describes modifications in reporting forms and evaluation procedures; training procedures and technics have also been amplified.

Available from Robert G. Ferguson, Research Director, MacDonald Training Center Foundation, 3901 N. Renellie Dr., Tampa 7, Fla.

187

Vocational Training Directory of the United States

By: **Nathan M. Cohen**

1958. 3rd ed. 228 p. tabs. Potomac Press, 2607 Arlington Blvd., Arlington 1, Va. \$2.95.

Vocational guidance counselors, librarians, and school officials should find this directory very useful as a reference tool since it contains information on more than 7,000 private and public schools offering a wide range of nearly 700 semiprofessional, technical, and trade courses. It also covers the health service schools (those offering training in physical and occupational therapy, medical technology, nursing, and x-ray technics and training for medical record librarians and medical record technicians). A list of vocational rehabilitation centers (by state) is included, as well as addresses of state vocational rehabilitation agencies. Use of the directory is simplified by the tabular presentation of information, classified by broad categories of training and listed by state and city. The course index with cross references is detailed.

188

Young Children in Hospitals

By: **James Robertson**

1958. 136 p. Basic Books, Inc., 59 Fourth Ave., New York 3, N.Y. \$3.00. (Published in England by Tavistock Publications, Ltd.)

The author, a member of the British Psycho-Analytical Society, has been conducting research for many years on the emotional effects on children of the loss of maternal care. Illustrated with case histories of small patients whom he has observed, the book describes the nature of the children and their emotional needs, parents' reactions to the child's hospitalization and illness, and the effect of attitudes, emotions, and beliefs of professional personnel engaged in caring for the child. Adverse psychological after-effects of hospitalization can be overcome by an understanding of parents' and child's needs during the child's hospitalization. The author goes into some detail on the fundamentals of management, hospital procedures, and the training of physicians and nurses in aspects of care for the hospitalized child. Written in easy-to-understand language, parents should find it thought-provoking; hospital administrators will discover implications for improving services for children. The author has been responsible for the documentary film, *A Two-Year-Old Goes to the Hospital*, distributed by the New York University Film Library.

Digests of the Month

Journal articles, chapters of books, research reports, and other current publications have been selected for digest in this section because of their significance and possible interest to readers in the various professional disciplines. Authors' and publishers' addresses are given when available for the convenience of the reader should he desire to obtain the complete article or publication. The editor will be most receptive to suggestions as to new publications warranting this special attention in Digests of the Month.

189

Cerebral Palsy in Children

By: Sven Brandt, M.D. (*Society and Home for Cripples, Copenhagen, Denmark*)

In: *Modern Prosthetics: A Report on the First International Prosthetics Course, Copenhagen, Denmark, August 1-10, 1957. p. 59-69. 1958. 97 p. Mimeo. Committee on Prostheses, Braces and Technical Aids, International Society for the Welfare of Cripples, 701 First Ave., New York 17, N.Y. \$1.00.*

The abnormal conditions imposed by cerebral palsy differ fundamentally from most other disorders requiring bracing. It is not a question of compensation for a lost extremity nor of replacing muscle power with artificial stability. Cerebral palsy is a disturbance of central co-ordination of movements, a neurological rather than an orthopedic disorder. The relative number of cases varies considerably in statistics given by various countries. Figures from countries in the Old World are remarkably low compared to those of the United States. In Denmark figures for extrapyramidal cerebral palsy (athetosis) are comparatively low. Because anoxia during birth seems to be the main cause of athetosis, we would guess that less active obstetrics in Denmark might be an explanation. Obstetric anesthesia has in the past usually been limited in Denmark to the very last period of expression and only small amounts of chloroform given. But habits are changing: some indications of increase in our frequency figures for cerebral palsy may reflect this.

Incidence of Cerebral Palsy in Various Countries (Children with cerebral palsy in every 1,000 born alive)

U.S.A. (Phelps, 1941).....	4
U.S.A. (Schenectady County, N.Y., 1949).....	5.9
England (Asher & Schonell, 1950).....	1
Sweden (Nilsson, 1951).....	0.6
Denmark (Scheel Thomsen, 1952).....	1.5
Denmark (Erik Hansen, 1954).....	1.5
Norway (Bjarne Andersen, 1954).....	1.9

In our study of 628 cases, two etiological factors, anoxia and prematurity, appear in one-fourth of the case histories. Anoxia seems responsible for up to more than 50 percent of our most severely handicapping types of cerebral palsy, athetosis and spastic tetraplegias. Prematurity dominates in spastic diplegias and paraplegias. Mild involvement of opposite arm and fingers is frequently found in appar-

ently hemiplegic children and also in both upper extremities of children whose handicaps may at first be considered paraplegic. In very small children mild involvement of hands cannot be diagnosed but must be kept in mind at later examinations. Many athetoid children are believed spastic because of tension present. The child must be completely relaxed before a stretch reflex indicating true spasticity can be ruled out. Early diagnosis may be rather complicated. We found that many moderate and mild hemiplegias in children younger than two or three years had escaped diagnosis in orthopedic outpatient clinics. I feel that prophylaxis against pes equinus contractures presupposes prophylaxis against spastic pes equinus. If spasticity is overlooked, early prophylaxis is impossible at a time when passive dorsiflexion in the foot may be performed in normal range in spite of increased tonus. Universal hypotonia, usually predominating in the muscles of the head, neck, and trunk, always indicates ataxia or athetosis even though athetoid movements may not yet be present. The preathetoid infants, with their expressionless faces and severe static retardation and retarded speech, have forced many to question their mental capacities, correctly in only some cases. Caution must be taken with judgment of intelligence in this type child during early infancy. Subnormal intelligence is found in at least 36 percent of all cerebral palsy cases. Neonatal asphyxia increases the risk of intellectual handicap. Except for some types with rather low risk of mental subnormality (left hemiplegias) and others with high risk (symmetric spastic tetraplegia and rigidity), the quota of 30 to 40 percent is rather constant. Some later figures from the United States give us even higher figures for mental retardation, up to 60 percent of all cases. Our lower figures may be explained by the fact that our institutions for feeble-minded take care of treatment and some mentally retarded children may not be referred to us. Several of our mentally defective cerebral palsied children have profited from bracing and surgery.

Treatment goes hand in hand with prophylaxis against abnormal habits and posture, including contractures. Profit by training depends on the degree of handicap and on the energy of the patient and parents. For the athetoid and ataxic child, treatment can provide only an environment favorable for spontaneous development and improvement in coordination. In the spastic child it is important

to add prophylaxis against contractures. These children need daily training and parents must cooperate. In certain patients spasticity and imbalance between spastic muscles and their weak antagonists may be such that physical therapy must be given up, but it is extremely difficult to screen such patients from the beginning. We usually allow for a period of conservative treatment before resorting to orthopedic operations.

Most popular in our clinic for spastic equinus is a short caliper brace, used rarely as only a night brace. Usually a day brace is also used. Day-and-night bracing may be combined as in the Perlstein caliper. For daytime we sometimes prefer a double-bar caliper that corrects plano-valgus deformity better. I believe a night brace against equinus tendency is given at too late a time. Many an orthopedic surgeon hesitates to order a night brace if he can easily dorsiflex the foot to less than 90 degrees in a one to three-year-old child. However, I find such children later develop severe spastic equinus deformity from contracture. To prevent such diagnostic failures I recommend examining movements and tonus in the ankle joint in both the supine and vertical positions. This change in posture will usually increase spastic hypertonia and disclose a leg muscle spasticity otherwise overlooked. Examination of knee reflexes is of some help if the child is relaxed, but a normal, anxious infant may also show increased knee jerks and this test may mislead. Some people argue against night bracing, claiming that spasticity is lacking during sleep. However, spasticity is not lost constantly or completely during sleep. Growing occurs during sleep, a factor frequently overlooked by specialists without pediatric training. Connective tissue between muscle bundles must also grow, but if a muscle is contracted most of the day because of spasticity, insufficient stimulus to growth is applied to the noncontractile connective tissue. This is the only explanation for the fact that, with growth, contractures develop in so many cases of spasticity of the leg muscles. To prevent this the connective tissue must be stretched and stimulated to grow day and night through proper bracing and exercise.

Foot-capsule (Denis Browne night brace): If a contracture develops, correction can hardly be acquired without surgery followed by proper bracing and physiotherapy. *Long braces*: These are used in case of very weak hip extensors and knee extensors where flexion contractures of the knees may develop. In some children long braces with Cauty-key are used to prevent hyperextension of knees. *Standing boxes*: These are used for children unable to keep their balance in the position of erect posture, in order to give them some sensation of weight-bearing in joints and muscles. Permanent abduction of the hips can be obtained simultaneously by a specially designed standing box. In smaller children adductor spasms may be counteracted through a Frejka splint. In a few children inward rotation or outward rotation deformities of the

hips have been corrected through daytime use of a long spiral spring (Codeville model) fixed to a hip corset.

190

Minnesota Studies in Vocational Rehabilitation: VI. A Survey of the Physically Handicapped in Minnesota

By: Industrial Relations Center, Univ. of Minnesota

1958. 57 p. tabs., charts. Univ. of Minnesota Press, 2037 University Ave., S.E., Minneapolis 14, Minn.

The 1957 session of the Minnesota state legislature appointed an Interim Commission to investigate the problems of the physically handicapped population in Minnesota. As a part of the total investigation, the Industrial Relations Center of the University of Minnesota, through an agreement with the Interim Commission, conducted a statewide survey to estimate the number of physically handicapped persons in the state and to study such things as the age, sex, disability distribution, and employment status of these persons. The information gained from the survey is to be used in making recommendations to the state legislature concerning problems of the handicapped. In the report "physically handicapped" is used to refer collectively to the physically handicapped, the mentally retarded, and those with mental illness. The data were collected between July 22 and August 4, 1958, by professional interviewers. The sample was designed to be representative of all households in the state with respect to population density and geographic location.

From information obtained from interviews at 2,440 households (940 rural and 1,500 urban) and questionnaires completed by 523 hospitals and related institutions, it was estimated that:

1. There are about 323,000 physically handicapped persons in Minnesota (approximately 10 percent of the total population), including about 288,000 in households and about 35,000 in special institutions, hospitals, special schools, and boarding-care and nursing homes. (Federal hospitals in Minnesota are included.) Of the physically handicapped in households, 183,000 are men and 105,000 women.
2. The largest disability groups are the orthopedic (89,000), cardiovascular (59,000), and generalized or systemic (32,000). Next come the neurological and neuropsychiatric groups with about 26,000 each.
3. About 40,000 handicapped persons are under 14 years of age; 200,000 are in the labor force age range of 14-64; and 77,000 are 65 and over. (*The following estimates apply only to the noninstitutionalized population.*)
4. Disabilities were caused by illness in 60 percent of cases; the cause was congenital in 14 percent; 9 percent were caused by employment accidents; 12 percent resulted from other accidents; and only 4 percent were caused by war injuries and/or illnesses. There was no information on one percent.
5. A large percentage of handicapped persons stated

DIGESTS

they did not recall receiving any assistance from agencies such as the Division of Vocational Rehabilitation (82%), the State Employment Service (85%), and the Veterans Hospital (80%). Most of those that did receive assistance received medical, surgical, or hospital services. Fifty-five percent, about 159,000 noninstitutionalized handicapped persons, have not received counseling about the best work for them. 6. Of the handicapped labor force population (aged 14-64), 56 percent are currently not working. This drops to 32 percent if housewives and students who have never worked are excluded. 7. About 22,000 (21%) of the handicapped in the labor force age range who are not working are actively looking for work, while 67 percent are not. (Twelve percent gave no information on this.) These percentages may be changed to 30 percent and 52 percent respectively if housewives and students who have never worked are excluded. 8. About 33 percent of the handicapped in the labor force age range who are not working have worked since their injury or illness.

The major implications of the survey findings appear to be:

1. The estimate of about 323,000 physically handicapped persons in the state of Minnesota is compelling evidence of the magnitude and importance of the problems concerning the physically handicapped.
2. A comparison of this large number with the number of persons rehabilitated by the state yearly (about 1,000) makes it evident that an overwhelming proportion of the handicapped population does not receive service from the rehabilitation agencies of the state.
3. The need for rehabilitation services (including job placement) in Minnesota is clearly shown by the facts that over half (56%) of the handicapped population of labor force age range are currently unemployed and about 21 percent of this group (22,000) are actively seeking employment.
4. It would seem desirable to increase services to the rural handicapped, since about 41 percent (118,000) of the non-institutionalized handicapped live in rural areas. This geographical distribution suggests the need for more rehabilitation services outside of major urban centers.
5. A comparison of the age distributions of the physically handicapped in Minnesota with the total group rehabilitated by the State Division of Vocational Rehabilitation (fiscal year 1956-1957) indicates the need for extending services to persons at higher age levels. Approximately 60 percent of the rehabilitated groups were below age 30 while only 30 percent of the handicapped are below age 30.
6. In view of the effect of Workmen's Compensation on employment of the physically handicapped, it is interesting to note that employment accidents are the origin of disability for only 9 percent of the Minnesota handicapped.
7. Other data obtained in the survey, such as the numbers of handicapped in each disability area, should be useful in estimating the extent that the total state rehabilitation program is meeting the needs of the physically

handicapped population. 8. The importance of these implications points to the need for a continuous and active research program as an integral part of the State Division of Vocational Rehabilitation. Present provision for research by the agency is apparently limited to compilation of annual report statistics. 9. The above implications indicate that the combined services of State DVR, State Employment Service, and related agencies are not meeting the needs of the physically handicapped in Minnesota. This suggests the need for expansion of the state programs and the desirability of continuing study of the problems of the physically handicapped in Minnesota.

191

Some Social Factors in Job Placement and Community Life of the Handicapped as Seen in Several Settings and Services in Relation to Long Island Industry: Final Report of the Three-Year Study

By: Adelphi College. (E. Louise Ware, Ph.D., Research Director, Vocational Rehabilitation Project)

1958. 132, 16 p. tabs. Mimeo. Adelphi College, Garden City, L.I., New York

Under a grant from the U. S. Office of Vocational Rehabilitation, a three-year research project was conducted under the auspices of the Graduate Division of Adelphi College, with Dr. Ware, project director, and Else B. Kris, M.D., associate director. Aims of this study (June 15, 1955-June 15, 1958) were: (1) To examine the status of handicapped persons actively employed in selected firms in open competitive industry with respect to (a) medical history, training, kinds of jobs, work conditions, skills used and potential skills, opportunities for learning; (b) changes in the status and way of life of these persons as a result of vocational placement and opportunity. (2) To consider the social factors in various settings and services in the continuum of the process in vocational rehabilitation from the standpoint of (a) the training afforded; (b) the nature of the placement: whether it is one with expectation and realization of future placement in open industry or other work, or a terminal experience. (3) To study the cases of certain handicapped in various settings to determine their present status and consider reasons for nonemployment, where found, and to consider further needs for training and counseling. (4) To ascertain the points of view, policies, and practices of industrial firms in the hiring of handicapped workers. (5) To assist the employer in the initial selection of the handicapped employee and in the use of his skills. (6) To help in developing guides for training.

The study included 881 handicapped persons, 661 of whom were interviewed. Special attention in the third year was given to considering why some handicapped obtained jobs and others did not. To do this 50 handicapped persons were reinterviewed, and data for a sub-

study were obtained from 336 manufacturing firms on eastern Long Island.

Findings

General Values.—The basic assumptions with which the study commenced have held true: (a) the handicapped person is first a person and second a handicapped person; (b) work conditions and situations affect other areas of social living; (c) the factor of handicap can be recognized and the individual make the most of his abilities. The ways of life and the mores of most handicapped interviewees were like those of the middle grouping in American society. The obtaining of gainful work has enabled many to attain and maintain a social role within this group in their community. More than a third of the 661 persons reporting sustained the handicapping condition 10 or more years ago, 236 through disease. Over a third of the disabilities were primarily orthopedic or neuromuscular. Of these, more than a fourth showed postpoliomyelitic effect. The next largest group (about a tenth) reported tuberculosis. Seven percent were primarily cardiac cases.

Almost one-fifth (and nearly two-thirds of the single) live in the parental home. Over two-fifths live with two or three other persons, nearly one-fifth with four or five, and a few live with six or more. The interviewees tended to be family-centered. Most were born in the United States—more than half in New York City. Both parents of 291 were born outside the continental limits of the United States. Nearly a third of the 661 were homeowners, while a fifth lived in rented apartments. Three-fifths resided in Nassau and Suffolk counties. The next largest number stated they resided in Queens and Kings counties, L.I. Of the group 302 had some or a complete high school education; 88 indicated a partial or completed college course. One hundred sixty-six said they had no friends, 167 had four to eight friends, and 143 had more than eight.

Of the 661, 447 were reported employed and 210 unemployed. The handicapped in open industry were reported to be regular in attendance; they showed skills on the job and were productive of goods in both quantity and quality. Some firms felt they were among their best employees. A large number of interviewees indicated they intended to stay on their present jobs. Among the 50 handicapped persons selected for follow-up interviews in the third year, 26 were employed and 24 unemployed. A comparison showed the two groups to be not very different as far as general social factors were concerned. The chief difference appeared in relation to drive and aspiration. A considerable number reported aspirations for the future such as another job, their own business, marriage (if single), and further education.

Findings from Neighborhood Studies.—The social patterns of the handicapped were found to be quite similar to those of the nonhandicapped population.

Findings from Industrial Firms.—Of the 336 manu-

facturing firms, a little more than a third indicated they hire the handicapped. The handicapped were located mainly in large firms hiring over 50 employees and primarily in three types of industry: manufacturing, non-electrical; manufacturing, electrical and electronic; and home building and equipment. The two drawbacks to hiring the handicapped most frequently reported were concern regarding need for tailoring of jobs and concern regarding accident and insurance risk. The majority of the 116 firms hiring the handicapped had found such workers to be at least average or better; 38 reported them as among the best employees. Over two-thirds of the firms contacted indicated they do not plan to hire the handicapped.

Special Problems

The problems of persons with a handicap were found to run the gamut of human experience. All but a few of the persons with epilepsy in this study could not get work chiefly because the employer feared that during a seizure an employee might become entangled in dangerous machinery or bring harm to others. The predicament of the former mental patient in remission from a severe emotional problem was very apparent throughout the study. Although a person with an emotional disorder may have a hard time meeting pressures of entering or reentering the work force, recent studies show that postmental patients may offer a great deal in the industrial world. Many retarded were unable to obtain work. Here the role of the workshop is an intermediate step in offering training and in helping the retarded to establish good work habits and social relationships. Already as a result of workshop training some have found their way into open industry.

Many of the severely handicapped homebound patients have been living in a state of loneliness and with feelings of frustration. In many instances work had been brought to them and they made modest amounts. In the group of persons over the age of 50, many have found work in either a workshop or open industry, but they are only beginning to be accepted in industry. The problem is accentuated when the aging person has a condition such as hemiplegia or cardiac impairment.

In the population of the first year, 25 of the 52 handicapped persons placed on waiting lists for jobs were still unemployed at the time of the home visit by the interviewer. In the population of the second year, 180 additional persons were seen to be unemployed—a large number of the total of the study.

Implications and Recommendations

Recommendations include: further counseling of the handicapped regarding work placements to enable them to make the most of their talents; further counseling to help the discouraged to develop incentive; further development of training and retraining to help the disabled

worker to offer maximum skills. Also recommended are: further locating of the handicapped in the home and the making available of information regarding vocational rehabilitation opportunities; further consideration of the training of the homebound worker to make the most of his vocational abilities and to assist him in broadening his social horizon when it is restricted. The social role of the workshop as a transitional experience for those who can be trained to enter competitive industry and in the lives of people who find this a terminal experience should be given further consideration. Competitive industry should be reassured regarding the ability of persons with a handicap. Measures should be adapted to allay fear regarding the accident risk. Encouragement should be given to the creating of additional opportunities in medium and smaller sized firms as well as in the larger industries. The findings indicate a need for further education of the public as to the potentials of handicapped as gainful workers.

192

Workshops for the Disabled in California

By: Nathan Nelson, Physical Restoration Services Consultant

1958. 28, (18) p. tabs. Mimeo. Vocational Rehabilitation Serv., State Dept. of Education, Sacramento, Calif.

This report surveys the programs of 56 private nonprofit voluntary organizations in California, the majority of those providing workshop rehabilitation services. In the past 10 years, the number of workshops greatly increased and existing shops expanded. New concepts were emerging and new programs, techniques, and terminology developing. When the survey was planned, this shift to the new encompassed only a minority of shops. The diversity found made general classification difficult. Shops were classified as generic (accepting many types of disabled) or categorical (accepting only those with specific disability). As long as generic shops exclude special groups, categorical shops will be established. The categorical, arriving late, had the advantage of newer workshop techniques.

Some of the generic group did mainly subcontract work, others salvage. All but two of the categorical did subcontract work. The salvage shops were older, employed more of the disabled, and operated differently than the subcontract shops. About one-third of the 32 salvage shops were started in the last decade, one-sixth in the last six years. In contrast, two-thirds of the subcontract workshops were begun in the last six years. Many subcontract shops began with more comprehensive programs than those of the salvage shops. By 1950, training, counseling, employment, and placement were often part of shops' programs. After 1950 many subcontract and some salvage shops had occupational diagnosis and work adjustment services, first geared to the needs of the shop. With orientation to industry, shops became transitional and gave up the concept

of "sheltered" services, becoming places of preparation for competitive employment. Most subcontract shops have comprehensive programs and are demonstrating what can be accomplished with special disability groups.

Purposes.—Purposes were reported as for production, therapy, or both, and as to whether they were mainly rehabilitative (to move persons into private industry) or terminal (to keep employees indefinitely). Two shops had purposes of both production and therapy. Ten shops (all generic) had primary purposes of therapy; 5 were subcontract and 5 salvage. Forty-three (6 categorical and 37 generic) reported main purposes of production; 25 were salvage shops and 18 were subcontract. Thirty-two shops (22 salvage) were mainly rehabilitative and 12 (7 salvage) terminal. Of the 12, 3 made placements in private industry. Eleven shops (4 salvage) reported combined rehabilitative and terminal purposes. No prevailing patterns in terms of stated objectives were found by types of shop.

Operations.—Since occupational techniques such as work samples related to work done in industry have not usually developed in California, a basic indicator of rehabilitation potential is the scope of operations. (When work opportunities in the shop are limited, professional services often are also.) Subcontract and salvage shops often do the other's type of work and both have developed some arts and crafts work (leather goods, novelties not made on production basis). Subcontract shops have developed manufacturing projects (items not subcontracted or salvaged but mass produced and sold at wholesale). Salvage shops usually have retail sales programs, as do a few subcontract shops. The general trend, especially in generic subcontract shops, is toward diversification. While this trend may in time diminish differences, the two main types of shops now have distinctly different operational patterns: salvage shops are larger physically, serve more disabled, and are as a rule less diversified in operations than are the subcontract.

Forty-three of all shops reported salvage operations. Twelve subcontract shops reported they did salvage. Thirty-eight shops reported they sold at retail. Twenty-six shops in all reported they did subcontract work (three were salvage shops). Ten sold arts and crafts at retail. Nine shops reported other services.

Disabilities Served.—Diagnostic classifications of disabilities or extent of involvement were not elicited as it was felt the information was not available in standard nomenclature or summary fashion. Categorical shops served: alcoholics only (2); mentally retarded only (2); cerebral palsied, including epileptics (1); and epileptics only (1). The generic excluded: mentally retarded (2); those incapable of shop work (2); the aged (1); those in need of "therapy" (1); and alcoholics (1). One accepted mentally retarded on a limited basis. Fifteen generic shops took the mentally and socially handicapped, 12 the

aging, and 7 included alcoholics. Twenty-two additional groups served: all disabilities (15); all physically handicapped (5); all physically handicapped veterans (1); or all physically handicapped young adults (1). In all, there were 15 shops accepting those with abnormal mental or emotional conditions, including the mentally retarded—24 if alcoholics are included. Six (5 salvage and 1 subcontract) indicated specifically they accepted the socially handicapped. Eight of 12 accepting the aged were salvage shops. As a group the subcontract shops accept the physically handicapped more often, and the salvage shops the mentally and socially handicapped and alcoholics.

Services and Number Served.—The shops reported they served 3,620: salvage shops, 2,958; generic subcontract

shops, 493; and categorical, 169. The following services were reported: employment (43 shops); vocational training (31); social evaluation and casework (29); placement and follow-up in industry (26); vocational guidance (25); prevocational training (24); prevocational evaluation (21); medical evaluation and supervision (15); psychological evaluation (14); occupational therapy (11); and physical therapy (4). The subcontract shops generally reported more comprehensive types of services than did the salvage shops. As a rule, physical therapy, occupational therapy, psychological evaluation, and social work services were carried on by persons skilled in these fields. Persons with varying skills were reported giving employment, prevocational evaluation, prevocational training, and placement services.

Events and Comments

Homemaker Services Conference

THE NATIONAL CONFERENCE on homemaker services, held in Chicago Feb. 10 and 11 under the sponsorship of 26 national voluntary agencies and the U.S. Department of Health, Education, and Welfare, considered the distinctive needs and purposes of homemaker services, their organization, and developing community support of such service. Preconference study groups met in seven major cities to map plans for further development of homemaker service programs, which have helped to maintain families in their own homes when illness, old age, or death had disrupted normal family life. Extensively used in Europe, this type of service is being more widely recognized in the United States, where approximately 150 agencies are currently making such aid available. Principal speakers at the Conference were Mrs. Katherine B. Oettinger, U.S. Children's Bureau; Dr. David E. Price, U.S. Public Health Service; Mr. Sol Morton Isaac, Ohio Citizens' Council for Health and Welfare; and Mrs. Agda Rossell, Ambassador of the Swedish Mission to the United Nations. Mrs. R. Livingston Ireland, Cleveland, served as Chairman of the Conference.

Research in Cerebral Palsy

THE NOVEMBER-DECEMBER, 1958, issue of *Cerebral Palsy Review* lists 34 of the research projects receiving federal support from the National Institute of Neurological Diseases and Blindness. According to the Institute, as of September 2, 1958, a total of \$3,363,250 had been allocated for 67 projects directly related to cerebral palsy and an additional \$1,170,440 in grants for research relating to cerebral

palsy but bearing on other problems. At the Institute at Bethesda 30 projects directly related to cerebral palsy were allocated \$854,911 and 22 other projects, indirectly related, \$466,545.

About Gout

THE ARTHRITIS AND RHEUMATISM Foundation, 10 Columbus Circle, New York 19, N.Y., in January, 1959, issued *About Gout: A Handbook for Patients*. It is designed to give patients a better understanding of the nature of the disease, its mechanisms, symptoms, and treatment, and is available at 10 cents per copy from the Foundation or its local chapters.

Dr. A. Bernice Clark Comments Total Rehabilitation Requires Early Referral

"THE PHRASE, 'early referral,' implies the recognition of the total problems which may evolve from an injury and the seeking of assistance as early as may be necessary to effect the total rehabilitation of the patient. . . .

"Among industrial accident cases referred to the Institute of Physical Medicine and Rehabilitation of New York University-Bellevue Medical Center, a large percentage requires treatment primarily because of complications which have resulted from injury. Common among these are deforming contractures, atrophy of disuse, general deconditioning, and social and psychological problems, all of which have resulted from prolonged inactivity. It is estimated that 80 to 90 per cent of the patients referred to the rehabilitation center are for such

secondary complications and would never have had need for referral if the concept of total rehabilitation were understood and practiced. A rehabilitation center should be reserved for the difficult cases which cannot be managed conveniently in the physician's office, and for those patients with diffuse problems requiring the entire armamentarium of the rehabilitation team. . . .

"It is the obligation of any physician, who is too busy to assume the management of total rehabilitation, to refer that patient to a physician who is willing to assume this responsibility. Referral should be made at the earliest possible time after the acute phase, in order to avoid secondary complications." —From *Rehabilitation in Industry*, edited by Donald A. Covall. 1958. Grune & Stratton, Inc., 381 Fourth Ave., New York 16, N.Y. \$6.00.

International Grant for Advanced Training

A NEW FELLOWSHIP has been created providing advanced training in rehabilitation in the United States for a physician from India. The Merck Sharp & Dohme International Fellowship was made possible by the contribution of \$10,000 to the World Rehabilitation Fund by the Merck Company Foundation. Currently 71 trainees (57 physicians and 14 nonphysicians) are receiving long-term advanced training in the United States under the auspices of the Fund. The new fellowship will be administered by the Fund, an American voluntary organization, in cooperation with the International Society for the Welfare of Cripples, 701 First Ave., New York 17, N.Y.

(Continued on page 96)

Abstracts of Current Literature

This abstracting section, together with other numbered references indexed in this issue, serves as a supplement to the reference book *Rehabilitation Literature 1950-1955*, compiled by Graham and Mullen and published in 1956 by the Blakiston Division of McGraw-Hill Book Company, New York. An author index will be found on the last page of the issue.

AMPUTATION—EQUIPMENT

193. International Society for the Welfare of Cripples. Committee on Prostheses, Braces and Technical Aids

Modern prosthetics; a report on the First International Prosthetics Course, Copenhagen... August 1-10, 1957. New York, The Society (1958). 97 p. Mimeo.

Includes lectures delivered at the First International Prosthetics Course and a brief description of the work of the Committee on Prostheses, Braces, and Technical Aids.

Partial contents: Amputee rehabilitation and modern artificial limbs, Thomas J. Canty.—Functional bracing of paralytics, Eugene F. Murphy.—Education of prosthetists in Denmark, K. Kristensen.—Principles in prosthetics management for cases with multiple handicaps.—Implications of fit and alignment for activities other than level walking, (both by) Eugene F. Murphy.—Special prosthetics problems in technologically underdeveloped countries, A. Bennett Wilson, Jr.—Prosthetics services in Japan, Masatora Hiyeda.—Technical aids; an important part of the rehabilitation scheme, Karl Montan.—Cerebral palsy in children, Svend Brandt.—Amputations; frequency and cause.—Management of the knee disarticulation, (both by) Knud Jansen.—Prosthetics in geriatrics, Arne Bertelsen and G. Ronn.—Summary.

Available from International Society for the Welfare of Cripples, 701 First Ave., New York 17, N.Y., at \$1.00 a copy.

194. Lineberger, Mildred I. (*Area Child Amputee Center, Grand Rapids, Mich.*)

Children who need prostheses. *Nursing Outlook*. Jan., 1959. 7:1:28-30.

In same issue: Almost all's right with their world, Catherine J. Patton and Virginia Barckley, p. 31-33.—An orthotist, prosthetist; what are they? Lester A. Smith, p. 34-35.

Describes progress made in the rehabilitation of child amputees at the Area Child Amputee Center in Grand Rapids and the Crippled Children's Home in Pittsburgh (articles by Misses Lineberger, Patton, and Barckley). Mr. Smith describes work of the orthotist and prosthetist and explains the certification and licensing program of the Orthopedic Appliance and Limb Manufacturers Association. Nurses in the field of amputee rehabilitation should be familiar with the significance of the certification program in order to counsel patients and explain unfamiliar terms.

195. Watkins, Arthur L. (*Massachusetts Gen. Hosp., Charles St., Boston 14, Mass.*)

Additional notes on rehabilitation of the bilateral lower extremity amputee. *Orthopedic & Prosthetic Appliance J.* Dec., 1958. 12:4:45-49.

Presents results of the further evaluation of end-results of rehabilitation in bilateral amputees admitted to the Bay State Medical Rehabilitation Clinic. (For a previous article describing results in 50 patients, see *Rehab. Lit.*, June, 1958, #584.) The current article gives data and findings in 23 additional patients seen from Jan., 1957 to Nov., 1958. Age of patients at time of rehabilitation referral ranged from 29 to 76 years, the greatest number being in the seventh decade of life. Conclusions drawn from findings on end-results are that only the young bilateral above-knee amputee can be expected to wear long legs successfully; regardless of age the above-knee amputee can be rehabilitated with pylons provided his heart condition is satisfactory. Bilateral below-knee amputees in this series all became satisfactory wearers of conventional prostheses, usually with only one cane for additional aid.

AMPUTATION—EQUIPMENT—RESEARCH

196. California. University. Department of Engineering

Biotechnical criteria for children's books, by Hilde Groth, Jeannine F. Dennis, and C. L. Taylor. Los Angeles, The University, 1958. (18) p. tabs. (*Rep. no. 58-72; special technical rep. no. 27*)

Reports research conducted at the University of California, Los Angeles, as part of the Engineering Artificial Limbs Project coordinated by the Prosthetics Research Board of the National Academy of Sciences-National Research Council. Primary purpose of the study was the development of biotechnical criteria for the prescription of terminal devices for children. Force and excursion measurements at five levels of load were conducted on 57 arm amputee children between the ages of 2 and 14 years. Integration of results with information from other sources on child development and activities led to the design recommendations. Cable excursions of commercial devices were found adequate for performance; no modifications seemed indicated. Maximum openings of these devices appeared satisfactory for manipulatory performance.

Issued by Institute of Industrial Cooperation, Dept. of Engineering, Univ. of California, Los Angeles 24, Calif.

APHASIA

197. Hoberman, Shirley Gall (*12 Madeleine Parkway, Yonkers, N.Y.*)

Speech techniques in aphasia and parkinsonism. *J. Mich. State Med. Soc.* Dec., 1958. 57:12:1720-1723.

Technics adapted to needs of patients with varied types of aphasia are discussed in some detail; language disabilities resulting from each type are mentioned briefly. Speech therapy in Parkinson's disease presents entirely different

problems, the most common of which is faulty phonation. Technics used with these patients are primarily directed to production of stronger, more resonant speech.

198. Law, C. W.

The post operative progress of a child suffering traumatic cerebral lesion, by C. W. Law and Audrey Shavell. *J. S. African Logopedic Soc.* Dec., 1958. 5:2:10-13.

A case report illustrating progress made by a six-year-old child after a cerebral gun-shot lesion. The article consists of the neurosurgeon's notes and the report of the Supervisor of the University Voice and Hearing Clinic. On initial testing the child appeared to be an almost pure expressive (motor) aphasic. Since he exhibited none of the typical signs of the "brain-injured child," prognosis appeared favorable in view of his age. The follow-up report attests to the accuracy of the original diagnosis and prognosis.

See also 207.

ARTHRITIS

199. Arthritis and Rheumatism Foundation. New York State Chapter (432 Fourth Ave., New York 16, N.Y.)

Children with juvenile rheumatoid arthritis; social and developmental problems, by Frances Kroll. New York, The Foundation, N.Y. State Chapter, 1958. 31 p. tabs.

A report of a two-year study of children with juvenile rheumatoid arthritis, their social and developmental problems during their illness, and the impact on their families. Children chosen for study were under 19 years of age, with onset of the disease before age 13 and involvement of more than one joint, whose illness lasted at least three months. All subjects had been treated in hospitals in New York City. Medical, social, and economic data on 79 patients are included. The study confirms other reports on the relatively uncommon occurrence of juvenile rheumatoid arthritis. A multiplicity of treatment modalities and sources of medical care were noted. Impact of this disease on the child and on his family is severe from the social, economic, educational, recreational, and vocational points of view. In addition to medical care, families of these children need individualized programs of social service.

ASPHYXIA

See 185.

BACKACHE

200. Gordon, Edward E. (Michael Reese Hosp., 29th and Ellis Ave., Chicago, Ill.)

Chronic low back pain. *Industr. Med. and Surg.* Jan., 1959. 28:1:26-33.

Experience with 100 patients with prolonged low back disability treated at a large rehabilitation center was analyzed to determine whether certain characteristics occurred regularly in these patients. They all represented industrial invalids refractory to prolonged medical and surgical treatment. Findings revealed a high degree of association between favorable personality characteristics and success in rehabilitation. Physicians should be alert for psychogenic disorders in many persons with low back disabilities. Dr. Gordon discusses the mechanism of

psychogenic back pain and suggests physical, pharmacological, psychological, and vocational treatment.

BRAIN INJURIES

201. Robinault, Isabel P. (630 W. 168th St., New York 32, N.Y.)

Perceptual difficulties and their relationship to therapy. *Cerebral Palsy Rev.* Nov.-Dec., 1958. 19:6:3-4, 15.

Points out the perceptual difficulties of patients undergoing all types of therapy and how an understanding of limitations in attention span, carry-over from training to actual activities of daily living, and sensory and tactile deficits can aid the therapist in adapting therapy to fit the patient's needs. The author urges less preoccupation with mechanical motor aspects of the patient and more consideration of motor responses in terms of sensory intake and the effect of environmental provocation on sensory intake. This concept of therapy recognizes that the therapist's ability to help the patient lies partly in her discovering how the patient perceives the learning situation and where his perceptions speed up or impede his progress.

See also 263.

BRAIN INJURIES—ETIOLOGY

See 185.

BRAIN INJURIES—SPECIAL EDUCATION

202. Jolles, Isaac (2431½ Cherry St., Quincy, Ill.)

The training of language and conceptual thinking in the child with brain damage. *J. S. African Logopedic Soc.* Dec., 1958. 5:2:7-9.

Teachers of the educable mentally handicapped are often perplexed by children who respond readily to the nonacademic program but fail in achieving satisfactory growth in reading ability. The author describes an instructional approach and a teaching sequence of value in training pupils to form concepts necessary to the development of language. Beginning with the introduction of concrete objects, the plan progresses through the use of pictures and the spoken word to the printed word.

203. Kaliski, Lotte (127 W. 79th St., New York 24, N.Y.)

The brain-injured child; learning by living in a structured setting. *Am. J. Mental Deficiency.* Jan., 1959. 63:4: 688-695.

Brain-injured children of school age vary widely in intelligence, functional behavior, or a combination of both. Characteristics of the brain-injured are listed to aid the teacher in recognizing symptoms and how they affect the child's learning ability. Technics for structuring an educational program for the brain-injured child around experiences in everyday living and the acquisition of skills necessary to social functioning are described.

BURSITIS

204. Krout, Robert M. (Mary Hitchcock Mem. Hosp., Hanover, N.H.)

Trochanteric bursitis; management, by Robert M. Krout and Thomas P. Anderson. *Arch. Phys. Med. and Rehab.* Jan., 1959. 40:1:8-14.

ABSTRACTS

An analysis of methods of management of 50 cases of chronic trochanteric bursitis, with a comparison of eight types of treatment. In this series it was believed that bursitis was secondary or associated with another condition, indicating the need for a thorough search for other disorders as the first step in management. It was particularly significant that improvement in bursitis occurred whenever it was possible to correct the associated disorder. Several illustrative case histories are included. A previous article by Dr. Anderson (*Arch. Phys. Med. and Rehab.*, Oct., 1958) outlined criteria for diagnosis of chronic or subacute trochanteric bursitis of the hip.

CANCER—NURSING CARE

205. Hayden, Mary L. (*Boston Univ., Graduate Div., Boston, Mass.*)

After surgery; rehabilitation for a full life. *Nursing Outlook*, Jan., 1959. 7:1:21-23.

The public health nurse working with patients who have undergone extensive head and neck surgery for cancer should be aware of the remarkable advances made in this type of surgery during the past two decades. She must understand the surgical procedure and postoperative care in the hospital in order to answer questions asked by the patient or his family. Since convalescence is lengthy, most patients are cared for in the home during this period. Psychological support for the family and patient, a knowledge of community resources, and a clear picture of rehabilitation goals are the responsibility of the public health nurse.

CEREBRAL PALSY

See p. 67; 182; 189.

CEREBRAL PALSY—ETIOLOGY

206. Polani, Paul E. (*Dept. of Child Health, Guy's Hosp., London, England*)

Prematurity and "cerebral palsy." *Brit. Med. J.* Dec. 20, 1958. 5111:1497-1499.

A review of data from the literature and studies of the author on the possible association of prematurity and cerebral palsy. Particularly strong is the association found with two neurological syndromes: dystonic/choreo-athetoid cerebral palsy after severe neonatal jaundice, not due to blood-group incompatibility, and cerebral spastic paraplegia/diplegia. Possible mechanisms of the latter relationship are discussed; a selective developmental origin for the neurological disorders is tentatively advanced. The suggestion that prematurity may at times cause postnatal interference in the development and maturation of critically maturing neurones is, the author points out, entirely hypothetical, having, however, implications for the possibility of prevention.

CEREBRAL PALSY—MEDICAL TREATMENT

See 218.

CEREBRAL PALSY—PSYCHOLOGICAL TESTS

207. Costello, C. G. (*Physical Restoration Centre, Regina Gen. Hosp., Regina, Sask., Canada*)

Aphasic cerebral palsied children's wrong answers on

Raven's "Progressive Matrices." *J. Clinical Psych.* Jan., 1959. 15:1:76-77.

Because several investigators have questioned the value of the Progressive Matrices in testing cerebral palsied children, the author compared responses of 10 cerebral palsied children showing definite signs of aphasia or related disturbances with those of a control group of post-polio-myelitic children showing no specific disturbance of intellect. Wrong answers on Raven's Colored Progressive Matrices were classified according to types of errors listed by Raven. The mean percentage of all errors for the cerebral palsied group was 62.4 percent and for the postpolio-myelitis group, 82.2 percent. Statistical analysis of the results was not made because of the smallness of the groups.

In this article data for only one type of wrong answer are presented. In every case the frequency of this type of error by the cerebral palsied child was lower than that by his postpolio-myelitic control.

CEREBRAL PALSY—SPECIAL EDUCATION

See 264.

CEREBRAL PALSY—SPEECH CORRECTION

208. Irwin, Orvis C. (*Iowa Child Welfare Research Station, 515 E. Hall, Iowa City, Iowa*)

Correct status of initial double consonant blends in the speech of children with cerebral palsy. *Cerebral Palsy Rev.* Nov.-Dec., 1958. 19:6:9-13.

A report of an experimental study of the ability of cerebral palsied children to use double consonant blends in speech. Tape recordings of the speech of 13 children were evaluated independently by two observers. The list of blends used was one compiled by Mildred Templin. Data are given on the effect of chronological and mental age on articulation, as well as the effect of sex, relation to medical diagnosis, extent and degree of paralytic involvement, and relation to general language ratings. Differences among mildly, moderately, and severely involved cases in this sample were not statistically significant. Three previously published articles by the author on articulation of consonants by cerebral palsied children have appeared in earlier issues of *Cerebral Palsy Rev.* and *J. of Speech and Hearing Disorders*, cited in the bibliography.

CHILDREN (DEPENDENT)

209. Bishop, E. Beryl (*Lapeer State Home and Boarding School, Lapeer, Mich.*)

Family care boarding homes. *Am. J. Mental Deficiency*. Jan., 1959. 63:4:703-706.

The third in a series of articles on the family care program for the mentally handicapped at Lapeer State Home and Training School, it describes the choice of communities for location of boarding homes, deciding factors in the choice of homes used, and the role of the patient's relatives in successful placement of patients. Values of the program for mentally handicapped patients are many. For reference to the second article of the series, covering selection and preparation of patients for boarding home placement, see *Rehab. Lit.*, March, 1957, #341.

CHILDREN'S HOSPITALS

See 188.

CHILDREN'S HOSPITALS—GREAT BRITAIN

210. British Paediatric Association

The welfare of children in hospital. *Brit. Med. J.* Jan. 17, 1959. 5115:166-169.

An abbreviated memorandum based on evidence submitted in February, 1958, by a subcommittee of the British Paediatric Association to the Central Health Services Council, discussing changing trends in pediatrics and making recommendations in regard to the hospitalization of children. Physical facilities of the hospital, admission procedures and care of the hospitalized child, and provision of special services such as education and recreation are discussed. Recommendations are for the improvement of standards of care for children to minimize traumatizing effects of hospitalization.

CHRONIC DISEASE

211. Goodrich, Martha (N.Y. Hosp.-Cornell Med. Center, 535 E. 68th St., New York 21, N.Y.)

Some changes in the sleeping and eating patterns of fifty patients with long-term illnesses, by Martha Goodrich and Doris Schwartz. *J. Chronic Diseases.* Jan., 1959. 9:1:63-73.

Because of the need for more information on the effects of chronic illness on patterns of daily living, especially in unhospitalized medical patients, a study was made of 50 patients with long-term illness. Subjects chosen were receiving care as outpatients of a large teaching hospital or as recipients of services from home-care programs of approved hospitals. Information on changes in eating and sleeping patterns was obtained through interviews with the patients. All reported some sort of change in both areas since onset of illness. Findings of the study have implications for improved nursing care for such patients.

See also 226; 254; 257.

CHRONIC DISEASE—INSTITUTIONS

212. U. S. Public Health Service

National Conference on Nursing Homes and Homes for the Aged, February 25-28, 1958...report. Washington, D.C., Govt. Print. Off., 1958. 85 p. (*Public Health Serv. publ. no. 625*)

Contains principal addresses given at the Conference, background information provided the participants, more than 100 recommendations, and a synthesis of discussions leading to the development of recommendations. Theme of the Conference was the improvement of services for the chronically ill and aged in nursing homes and homes for the aged. Eight discussion groups considered the role of such homes, professional services provided, nutrition and food service, social and related services, environmental health and safety, regulatory agency problems, financing of facilities and services, and administration. Includes a list of participants, their professional positions and addresses, as well as nonfederal agencies and associations represented at the Conference.

Available from U.S. Superintendent of Documents, Washington 25, D.C., at 55¢ a copy.

CONGENITAL DEFECT

213. U. S. National Institutes of Health

Congenital malformations; papers presented at a Con-

ference on Teratology, April 15-16, 1957. *Pediatrics* (Supplement). Jan., 1959. 23:1 (Part II):195-251.

Contains papers presented at a Conference on Teratology sponsored by the National Institutes of Health and the Association for the Aid of Crippled Children, New York City. (An earlier Supplement, annotated in *Rehab. Lit.*, June, 1957, #717, included papers from a similar Conference.)

Contents: Consanguinity and the etiology of congenital malformations, William J. Schull.—Thirty-four fertilized human ova, good, bad, and indifferent, recovered from 210 women of known fertility; a study of biologic wastage in early human pregnancy, A. T. Hertig (and others).—Developmental anomalies in mice resulting from action of the gene, disorganization, a semi-dominant lethal, Katherine P. Hummel.—Congenital malformations induced by riboflavin deficiency in strains of inbred mice, Harold Kalter.—A comparison of the teratogenic effects of five polyfunctional alkylating agents on the rat fetus, M. Lois Murphy.—Inheritance of susceptibility to congenital deformity, Meredith N. Runner.

Single copies of the Supplement available from American Academy of Pediatrics, 1801 Hinman Ave., Evanston, Ill., at \$1.00.

CYSTIC FIBROSIS—PHYSICAL THERAPY

214. Doyle, Barbara (Children's Med. Center, 300 Longwood Ave., Boston 15, Mass.)

Physical therapy in the treatment of cystic fibrosis. *Phys. Therapy Rev.* Jan., 1959. 39:1:24-27.

A brief explanation of the nature of the disease, its symptoms, and the purpose of therapeutic measures in the care of such patients. The paper presents an outline of some physical therapy technics found helpful in the management of more than 100 children with cystic fibrosis having varying degrees of pulmonary involvement. Objectives of physical therapy in this disease are to maintain or obtain better lung function through breathing exercises and, where necessary, postural drainage. Adaptations of certain technics in both are discussed and general considerations for their application described.

DEAF—ETIOLOGY

215. Jackson, A. D. M. (Institute of Child Health, Great Ormond St., London, W.C. 1, England)

Deafness following maternal rubella; results of a prospective investigation, by A. D. M. Jackson and L. Fisch. *Lancet.* Dec. 13, 1958. 7059:1241-1244.

A report of a subsidiary investigation, part of a national study in Great Britain on the effects of virus infections during pregnancy, it is the first, the writers believe, to include detailed hearing tests with audiograms on surviving children. Incidence of congenital deafness after maternal rubella was about 30 percent. In a third of the cases deafness was unilateral. It is strongly recommended that any child whose mother gives a history of rubella in early pregnancy should be followed for at least four years, until audiometry can be carried out. This precaution should be observed even in children whose hearing appears to be normal. Findings on deafness were considered important enough to warrant publication in detail. A full report of the national study will be issued later by the Ministry of Health.

ABSTRACTS

DEAF—MEDICAL TREATMENT

216. Foxen, E. H. Miles (*Westminster Hosp., London, England*)

Relief of deafness by stapes mobilization. *Brit. Med. J.* Dec. 27, 1958. 5112:1558-1561.

Traces development of the technic of stapes mobilization from the 1870's until rediscovery of its value in 1952. Indications for its use in the treatment of deafness from varied causes are discussed; surgical procedures are described in some detail, as are postoperative care and complications likely to occur after surgery. Advantages of stapes mobilization over fenestration are given in relation to length of stay in the hospital, time required for operation, postoperative complications, and possibilities of again operating in case of failure.

DEAF-BLIND—EMPLOYMENT

217. Rusalem, Herbert (*57 Willoughby St., Brooklyn 1, N.Y.*)

The vocational status of deaf-blind adults. *Voc. Guidance Quart.* Winter, 1958. 7:2:124-126.

Findings of a study of employment potentialities of deaf-blind adults, conducted at the Industrial Home for the Blind, Brooklyn, revealed some interesting facts that have implications for placement. Work performance of the deaf-blind was compared with that of the hearing-blind in the IHB shops and elsewhere. In selected jobs, performance of the deaf-blind was equal or superior to that of the hearing-blind. Facts are outlined for those agencies contemplating offering employment opportunities to the deaf-blind, to guide them in counseling and placement. Through a comprehensive rehabilitation program, deaf-blind persons can achieve a degree of vocational and economic independence. The author is Director of Professional Training, Industrial Home for the Blind.

DRUG THERAPY

218. Baird, Henry W., III (*St. Christopher's Hosp. for Children, 2600 N. Lawrence St., Philadelphia 33, Pa.*)

A comparison of Meprospan (sustained action meprobamate capsule) with other tranquilizing and relaxing agents in children. *J. Pediatrics.* Feb., 1959. 54:2:170-175.

A report of four years' experience with meprobamate, reserpine, promazine, and zoxazolamine as therapy for 210 children with cerebral palsy (athetoid or spastic), with behavioral disturbance with evidence of mental retardation, headache, or sleeplessness where mental and motor development was believed within the limits of normal, or with brain-injury. Each child was treated with meprobamate and at least one other relaxing drug. Meprobamate (tablet and capsule) proved most useful and least toxic of drugs studied. Special mention is made of Meprospan, a long-acting form of meprobamate in capsules, because of its acceptance and tolerance by children. The possibility of side-reactions is minimized because of the gradual release of the drug and its sustained action at reduced dosage. 20 references.

See also 238.

EMPLOYMENT (INDUSTRIAL)

See 191.

EMPLOYMENT (INDUSTRIAL)—PLACEMENT

219. Doyle, T. J. (*Sperry Gyroscope Co., Great Neck, L.I., N.Y.*)

The chronically ill are employable, by T. J. Doyle and R. J. Murray. *J. Chronic Diseases.* Feb., 1959. 9:2:89-94.

Experiences of Sperry Gyroscope Company in maintaining 1,200 employees (7.8 percent of the total work force) with a serious medical or physical handicap have proved that employment of the chronically ill under the strict controls described works no hardship in a company that spreads its insurance risks over a reasonably large population. The system of medical classification employed by the medical department in evaluating the individual for job assignment is discussed; a statistical breakdown of medical disabilities of employees of Sperry Gyroscope Company is included.

220. U. S. Civil Service Commission

Selective placement; aids for placement officers and supervisors in hiring workers according to their physical abilities. Washington, D.C., The Commission, 1958. 75 p. (Personnel methods ser. no. 9)

A "do-it-yourself" guide for nonmedical personnel (placement officers, coordinators, and counselors) to aid in job analysis before placement of the physically handicapped. Analyses of job requirements made by medical personnel of the Civil Service Commission have appeared earlier in *A Guide for the Placement of the Physically Handicapped* (Pamph. 14), issued in four parts. Job analyses in the current guide are those not included in the original pamphlets. The role of various personnel in the agency responsible for selective placement is described. Specific instructions for making the job analysis are included. A brief bibliography of selected materials, including films available from the President's Committee on Employment of the Handicapped, is given.

Available from U.S. Superintendent of Documents, Washington 25, D.C., at 30¢ a copy.

HEART DISEASE—EMPLOYMENT

221. January, L. E. (*University Hospitals, Univ. of Iowa, Iowa City, Iowa*)

Rehabilitation of farmers with heart disease, by L. E. January (and others). *J. Am. Med. Assn.* Jan. 31, 1959. 169:5:427-429.

A report of results of a team study of the use of community resources for aiding farmers with heart disease in solving their occupational problems. Primary purpose was to determine the possibility of applying principles and technics of the industrial work evaluation unit in a rural setting. Occupational status of 43 men and 3 women with heart disease was studied in regard to their needs for rehabilitation and their potentialities. Results of the demonstration proved the plan was medically safe and agriculturally sound; this multidisciplinary approach is a practical way of meeting rehabilitative needs. The county extension director and a vocational counselor from the State Division of Vocational Rehabilitation were members of the team; job analysis was done by the extension director.

HEART DISEASE—NURSING CARE

222. *Nursing World.* Feb., 1959. 133:2.

Partial contents: Comprehensive care for the rheumatic

REHABILITATION LITERATURE

heart patient, Rosa Corrie (and others).—War against heart diseases, Myrtle H. Coe.—Emotional needs of the cardiac patient, Florence C. Elliott.—The nurse's role in cardiac catheterization, Helen Creighton.

In this special issue devoted to new developments in the treatment of cardiac disease and improvements in cardiac nursing, the team approach to rheumatic fever and the nurse's responsibilities to patients experiencing anxiety and emotional stress are discussed. Myrtle H. Coe's article covers advances in research in etiology, diagnosis, therapy, and prevention.

HEART DISEASE (CONGENITAL)—NURSING CARE

223. Carter, Waneta N.

The child with congenital heart disease. *Am. J. Nursing*. Feb., 1959. 59:2:199-201.

Ten years' experience as office nurse to a surgeon who treats many children with congenital heart disease has taught the author much in regard to dealing with anxieties of parents. The nurse may help parents in realization of the need for surgery, in making hospital arrangements, in understanding hospital regulations and procedures, and in the postoperative home care of the child. Guided by the physician, the nurse can offer much reassurance and helpful information.

HEMIPLEGIA

224. Knapp, Miland E. (920 S. 7th St., Minneapolis 4, Minn.)

Problems in rehabilitation of the hemiplegic patient. *J. Am. Med. Assn.* Jan. 17, 1959. 169:3:104-109.

Although the philosophy of rehabilitation emphasizes remaining ability rather than disability, there are still unresolved problems in the management of the hemiplegic patient. The author bases his discussion on observations on 122 patients at an inpatient rehabilitation center (Elizabeth Kenny Institute); he notes the significance of brain damage in limiting final goals of rehabilitation in the hemiplegic patient. Early attention to muscular problems in hemiplegia and adequate early treatment can, in many cases, result in self-sufficiency. Those with right-sided hemiplegia, in spite of speech and language defects, more often return to work than those with involvement of the left side. Visuospatial defects are seen in left-sided involvement. A practical method is presented for treating hemiplegic patients in the acute disease hospital without specialized rehabilitation personnel.

HEMOPHILIA

225. White, Dorothy W.

Home care of the hemophilic child. New York, Natl. Hemophilia Foundation, n.d. 14 p.

A pamphlet published by the National Hemophilia Foundation for parents, it gives general information and some simple treatments and aids for use with minor hemorrhages, how best to handle the patient, measures to prevent deformity, and the best psychological approach to the problem. Suitable outdoor and indoor activities and hobbies the hemophilic child can enjoy without danger to himself are suggested. First-aid technics, care of throat bleeding and head injury, care of the teeth, and control of bleeding in various parts of the body are discussed, as

well as care of the child in infancy and preschool and school years.

Available from the National Hemophilia Foundation, 175 Fifth Ave., New York 10, N.Y., at 25¢ a copy.

HOMEBOUND—PROGRAMS

226. Perrow, Charles (Univ. of Michigan, Ann Arbor, Mich.)

Research in a home care program. *Am. J. Public Health*. Jan., 1959. 49:1:34-44.

The reliability of data from the few research studies available on home care programs is questioned due to the methodology employed. The author shows how descriptive analysis of results in the San Francisco Home Care Program, a community-wide demonstration project, produced information of value. Value of the method lies in the fact that significant problems can be attacked without the elaborate facilities required by experimental research. The role of the home care team and its members, with an analysis of the problems faced by the patient, is presented in illustrations.

JUVENILE DELINQUENCY

227. Chandler, Charles S. (S. Carolina State Hosp., Columbia, S.C.)

Arraignment, examination, and confinement of the mentally defective delinquent, by Charles S. Chandler, Albert J. Shafter, and Rodney M. Coe. *Am. J. Mental Deficiency*. Jan., 1959. 63:4:723-729.

Much controversy regarding treatment, place of confinement, and administrative details of arraignment and examination of the mentally defective delinquent has arisen from lack of agreement on a clinical definition of the defective delinquent. The study reported was undertaken to determine whether a legal basis existed for defining the defective delinquent and his management. A survey revealed only a few states have specific laws regarding such people; even among these states opinion differs on whether the defective delinquent is chronologically a minor or an adult. The authors review the problems and make recommendations for meeting them through adequate legislation, rehabilitation programs, and research.

LATERALITY

228. Spitzer, Robert L. (722 W. 178th St., New York 32, N.Y.)

The relationship between "mixed dominance" and reading disabilities, by Robert L. Spitzer, Richard Rabkin, and Yale Kramer. *J. Pediatrics*. Jan., 1959. 54:1:76-80.

Recent literature is not in agreement regarding the effect of "mixed dominance" (the preferred hand and eye being on opposite sides of the body) on reading disability. This paper reports a study of the incidence of mixed dominance in a group of children with reading disabilities as compared with a group of normally reading children. The theoretical basis for the possible relationship between mixed eye-hand dominance and reading disability is discussed; literature in the field is reviewed briefly. The current study revealed no significant difference in incidence of mixed dominance between the two groups. The authors believe this is strong evidence against the hypothesis that there is more than a chance relationship between mixed dominance and reading disability. 22 references.

ABSTRACTS

LEG

229. Ring, P. A. (*Royal Coll. of Surgeons, London, England*)

Prognosis of limb inequality following paralytic poliomyelitis. *Lancet*. Dec. 20, 1958. 7060:1306-1308.

A reappraisal of the progress and prognosis of limb inequality after poliomyelitis in a series of 115 patients treated at the Hospital for Sick Children in London. From observations of the course of limb inequality, the writer concluded that the tibia is affected more than the femur, regardless of distribution of paralysis. Shortening is almost always progressive throughout childhood, developing more rapidly in the first few years after onset of poliomyelitis but less rapidly thereafter. Age at onset has little influence on annual increment of shortening; final inequality is, however, determined by the length of time intervening between onset of the disease and epiphyseal closure. Clinically patients can be grouped in three distinct categories by severity of involvement and muscle loss. In the most severely affected, however, some factor other than muscle loss appears responsible for gross depression of epiphyseal activity.

MENTAL DEFECTIVES

230. Benoit, E. Paul (*Governor Bacon Health Center, Delaware City, Dela.*)

Toward a new definition of mental retardation. *Am. J. Mental Deficiency*. Jan., 1959. 63:4:559-565.

Mental retardation is, in effect, a behavioral deficit with failure to measure up to statistically derived expectations; however, cultural variability is one of many difficulties met in determining mental retardation. Dr. Benoit suggests that Hebb's theory of the organization of behavior be re-examined for applicability to mental retardation. The author's proposed definition is advanced as more promising than those already in the literature; empirical experimentation could be used to test the assumption with a view to inducing and measuring change. By suggesting that mental dysfunction is due to impaired efficiency in the nervous system, the definition systematically points to the possibility of remediation.

231. Connecticut State Department of Health (*State Office Bldg., Hartford 15, Conn.*)

Mental retardation in the preschool child (Pt. I); Mental retardation in the young child: the parents' point of view (Pt. II); Mental retardation in the young child: the role of the public health nurse (Pt. III). *Conn. Health Bul.* Nov., Dec., 1958, & Jan., 1959. 72:11 & 12 and 73:1. 3 pts.

A series of articles prepared from material presented during a three-day inservice education program for public health nurses of the Connecticut State Department of Health. Part I covers medical aspects of mental retardation and care of the mentally retarded preschool child. Typical family problems and the role of community and professional personnel involved are discussed. Part II reports a panel discussion of problems presented by mentally retarded children and methods used to meet them. Eight mothers of retarded children participated. Part III considers the role of the public health nurse in providing services for mentally retarded children and their families. Prevention, case finding and referral, parent counseling,

and program planning all fall within the scope of the public health nurse's responsibilities.

232. Gibson, Robert (*Manitoba School, Portage la Prairie, Manitoba, Canada*)

Changing concepts of mental deficiency. *Mental Hygiene*. Jan., 1959. 43:1:80-86.

A discussion of current uncertainties in terminology, definition, and incidence of mental deficiency. There is obvious lack of uniformity in deciding what constitutes mental deficiency; the author illustrates with different theories and views propounded in the literature. Data on the incidence in various countries are equally misleading. However, increased interest and study of the problem may lead to greater understanding and clarification of aspects of mental deficiency.

233. Hirsch, Ernest A. (*Menninger Clinic, Topeka, Kan.*)

The adaptive significance of commonly described behavior of the mentally retarded. *Am. J. Mental Deficiency*. Jan., 1959. 63:4:639-646.

The characteristic behavior of retarded children was traditionally thought to reflect primarily inability or deficit. This paper suggests how such behavior may represent an attempt on the part of retarded children to maintain self-esteem in the face of intellectual or social demands they can meet only with difficulty or not at all. The behavior pattern, the author points out, can profitably be understood as having both positive and negative meanings. The "negative" meaning is often sociological rather than psychological. Patterns of behavior described are by no means limited to the intellectually retarded. It is noted that the mentally retarded, when given emotional support by parents, teachers, and siblings, may feel less threatened by their inability to accept or adjust to demands.

234. Slobody, Lawrence B. (*1 E. 105th St., New York 29, N.Y.*)

The management of mental retardation, by Lawrence B. Slobody (and others). *Pediatric Clinics N. Am.* Aug., 1958. 5:3:667-685.

A general discussion of the wide variety of conditions producing mental retardation and the major medical, social, and mental health problems it presents. The authors stress the need for comprehensive evaluation of the child's capacities and limitations; appraisals of the motor, sensory, visual, and hearing handicaps should be made and psychologic evaluation undertaken. A classification scheme suggesting diagnostic possibilities is presented. Management of the retarded child and parent guidance are reviewed, as well as the wide range of services needed. 66 references.

See also 227; 258.

MENTAL DEFECTIVES—DIAGNOSIS

235. Bower, Eli M., comp.

Diagnostic problems in mental retardation; a report of a workshop at Long Beach and San Francisco State Colleges, June 17-30, 1957, compiled by Eli M. Bower and Jerome H. Rothstein. Sacramento, Calif., State Dept. of Education, 1958. 64 p. (*Bul.*, Calif. State Dept. of Educ. Aug., 1958. 27:7)

Contains a selection of papers presented at both workshops, representing a cross section of professional thinking

about responsibilities of the pediatrician, school psychologist, school administrator, teacher, and social worker in the field of mental retardation. The need for teamwork in identifying mentally retarded children and providing for their educational needs is stressed.

Contents: Differential diagnosis of mental retardation, Joseph Wortis.—The private pediatrician's approach to the problems of mental retardation, Herbert Korngold.—The contribution of the psychologist to the diagnostic team, John F. Bell.—The school psychologist's role in diagnosis, Thomas W. Smith.—Factors in the appraisal of intelligence, Harold Skeels.—Research on pseudo-mental retardation, Harold F. Burks.—Cultural values and psychological diagnosis of mental retardation, Samuel C. Kohs.—The mental health problems of families with retarded children, Rudolph P. Hormuth.—Interdisciplinary teamwork, George Tarjan.

Available from Bureau of Textbooks and Publications, California State Dept. of Education, Sacramento 14, Calif., at 35¢ a copy.

MENTAL DEFECTIVES—EMPLOYMENT

See 186.

MENTAL DEFECTIVES—ETIOLOGY

236. Kratter, Frederick E. (*Letchworth Village, Thiells, N.Y.*)

Research into the causes of mental deficiency. *N.C. Med. J.* Dec., 1958. 19:12:528-534.

A brief survey of current research activity in the field of mental deficiency, the causes of which include social, technical, and economic factors of the environment. Current knowledge on factors affecting fetal life, the possible effects of heredity and environment, antigenic factors, and inborn metabolic errors and the possible explanations for mongolism are discussed. The author suggests that a central clearinghouse for studies in this field would prove very useful and stimulating to research. 32 references.

MENTAL DEFECTIVES—INSTITUTIONS

237. Goldstein, Herbert (*Institute for Research on Exceptional Children, Univ. of Illinois, Urbana, Ill.*)

Population trends in U.S. public institutions for the mentally deficient. *Am. J. Mental Deficiency.* Jan., 1959. 63:4:599-604.

Increasing community provisions for the mentally deficient, medical advances, and activities of pressure groups are resulting in younger, more severely mentally deficient children being admitted to institutions. Since children of this type are rarely amenable to training and eventual return to the community, it would appear that the institution will become less a training center for the return of higher mental status patients to the community and more a custodial center. With decrease in institutional death rate, the number of aged and aging in such institutions is on the rise, posing problems in long-term care. These current trends will necessitate increased personnel, changes in school curricula, and increased financial support due to rising costs per capita.

MENTAL DEFECTIVES—MEDICAL TREATMENT

238. Utley, Marvin D. (*Lapeer State Home and Training School, Lapeer, Mich.*)

Use of ectylurea (Nostyn) in mentally retarded patients; preliminary report of effects on seizures and spasticity. *J. Mich. State Med. Soc.* Dec., 1958. 57:12:1712-1714.

Combined spastic-seizure cases in institutions for the mentally retarded present problems in management since the anxiety and tension many of these patients exhibit may trigger spastic-seizure episodes. Ectylurea was administered daily to 22 such patients to determine whether a reduction in anxiety and tension would reduce frequency and severity of spasticity and seizures. A drug was needed that would curtail anxiety and tension without having anticonvulsant and muscle-relaxing properties. Because of its reported high degree of safety in clinical use, ectylurea was chosen. Over-all improvement in spasticity was 14 percent; reduction in seizures, 24 percent. Data indicate that control of anxiety and tension in such patients may, in some instances, be helpful. Further clinical investigations are needed with the drug before a true evaluation is possible.

MENTAL DEFECTIVES—PARENT EDUCATION

239. Stoddard, Hilda M. (*42 Villa Court, Hempstead, L.I., N.Y.*)

The relation of parental attitudes and achievements of severely mentally retarded children. *Am. J. Mental Deficiency.* Jan., 1959. 63:4:575-598.

Reports an investigation of relationship between parental attitudes toward the trainable mentally retarded child and the child's level of achievement. A Behavior Rating Scale and a Parental Interview were used in the study of 32 children in trainable classes administered by the Vocational Education and Extension Board of Nassau County, N. Y. No correlation was found between parental awareness and acceptance of the nature of the defect and the growth a trainable mentally retarded child makes, or his mental age, chronological age, IQ, or progress during the year. Lack of correlation was considered insufficient proof that there is no relation between parental attitudes and level of achievement. Further research areas are suggested. Possible usefulness of testing instruments described is pointed out. The Parental Interview form is included. 55 references.

MENTAL DEFECTIVES—PROGRAMS

See 209.

MENTAL DEFECTIVES—PSYCHOLOGICAL TESTS

240. Bullock, Donald H. (*128 Greenwood Ave., Wyncote, Pa.*)

Diagnosing child behavior: II. The behavior of retarded and non-retarded subjects in a psychological work-for-reward situation, by Donald H. Bullock and David B. Maline. *Training School Bul.* Nov., 1958. 55:3:47-53.

A report of a research project to determine similarities and differences between retarded and nonretarded children of comparable mental ages and to obtain ideas on the role of emotional maturity in mental retardation. The general technic of work-for-reward situations was evaluated as a potential diagnostic tool. Use of experimental technics for obtaining more knowledge on emotional and intellectual aspects of both retarded and nonretarded subjects should

ABSTRACTS

lead to better understanding of the nature of retardation and better ways to assist the retarded.

241. Garrison, Mortimer, Jr. (*U.S. Children's Bur., Washington 25, D.C.*)

A comparison of psychological measures in mentally retarded boys over a three-year period as a function of etiology. *Training School Bul.* Nov., 1958. 55:3:54-60.

Presents a partial analysis of data available from a three-year longitudinal study of developmental patterns in three etiological groups of mentally retarded boys. Pertinent literature is reviewed briefly, showing conflicting evidence concerning differences associated with etiology in mental retardation. Mean scores for each group were examined for any indication of differences that might be related to the presumed etiology (familial, unexplained, organic) of the mentally retarded groups. Data did not indicate any developmental pattern that would tend to differentiate etiological groups of the retarded. The three groups appeared to resemble each other somewhat more at the end of the project than at the beginning.

242. Klausmeier, Herbert J. (*Dept. of Education, Univ. of Wisconsin, Madison 6, Wis.*)

Relationships among physical, mental, and achievement measures in children of low, average, and high intelligence, by Herbert J. Klausmeier, Irvin J. Lehmann, and Alan Beeman. *Am. J. Mental Deficiency.* Jan., 1959. 63:4:647-656.

Three hypotheses—1) that a low level of physical development within the child accompanies low achievement in arithmetic and reading; 2) that uneven physical development within the child (split growth) accompanies low achievement in the same subjects; and 3) that the within-child variability in strength of grip, intelligence, reading, language, and arithmetic achievement is the same among children of low, average, and high intelligence—were studied to determine relationships among physical, mental, and achievement measures in children of the same chronological age but differing in degree of intelligence. The first hypothesis was upheld for boys but not for girls; the second and third hypotheses were rejected. On further testing, however, using three achievement measures, no difference was found among the three IQ levels. Within-child variability in reading, arithmetic, and language achievement was judged the same among children of low, average, and high intelligence. Information is given on characteristics of the subjects, measures obtained, reliability and validity of measures, analysis of data, and findings.

243. Spitz, Herman H. (*Edward R. Johnstone Training and Research Center, Bordentown, N.J.*)

A comparison of mental retardates and normals on visual figural aftereffects and reversible figures, by Herman H. Spitz and Leonard S. Blackman. *J. Abnormal and Soc. Psych.* Jan., 1959. 58:1:105-110.

This study is described as "the first in a series designed to describe mental retardation in terms of those specific components of perception, learning, cognition, and personality which constitute the dynamic complex referred to as intelligent or adaptive behavior." Its objective was to compare performances of retardates and normals of equal chronological age on a test presumed to measure perceptual rigidity and one presumed to measure neural modifiability. The hypothesis that there is a difference in the capacity of normals and retardates to perceive visual figural after-

effects was supported by the findings. Retardates showed a significantly poorer capacity to satiate; tests of the persistence of the aftereffects indicated that effects of satiation do not dissipate as rapidly in retardates as in normals. Mentally retarded subjects manifested significantly greater perceptual rigidity; no significant differences were found between endogenous and exogenous retardates on either test.

MENTAL DEFECTIVES—RESEARCH

244. Garrison, Mortimer, Jr. (*U.S. Children's Bureau, Washington 25, D.C.*)

Research trends in mental deficiency. *Children.* Jan-Feb., 1959. 6:1:10-12.

A brief review of current research in mental retardation. While this paper is primarily focused on behavioral sciences, new concepts and the relating of experimentation to current theory are evident in other disciplines. Efforts of the National Association for Retarded Children, National Institute of Neurological Diseases and Blindness, National Institute of Mental Health, Association for the Aid of Crippled Children, and the New York Foundation have resulted in jointly supported surveys of biological, psychological, and social problems in mental retardation. Other governmental departments are supporting projects that should add to the knowledge in the field.

MENTAL DEFECTIVES—SOCIAL SERVICE

245. Stone, Nellie D. (*Guidance Clinic for the Retarded, East Orange, N.J.*)

Clinical team treatment of a mentally retarded child and his parents; casework with the mother. *Am. J. Mental Deficiency.* Jan., 1959. 63:4:707-712.

In same issue: ... Group counseling and play observation, Bernard L. White, p. 713-718.—Discussion of papers presented by Mrs. Stone and Mr. White, Joseph J. Parnicky, p. 719-722.

A discussion of the treatment of parents of a four-year-old mildly retarded boy, illustrating the use of casework and group counseling as part of a total plan for family help provided through a community guidance clinic operated by a unit of the New Jersey Association for Retarded Children. It is hoped that general community welfare services will be broadened to include adequate services to meet the needs of such parents. Mr. White, clinical psychologist, further discusses treatment of this child and his parents through play observation of the child and group counseling of both parents. Results of the coordinated treatment plan show that each member of this family gained insight or ability to function more effectively. The case illustrates use of time limits and realistic treatment goals. Dr. Parnicky points out the implications of both papers in regard to clinical programs for the retarded child and his parents, the vital importance of counseling parents in conjunction with treatment of the child, and the need for team approach in effective clinical treatment.

MENTAL DEFECTIVES—SPECIAL EDUCATION

246. Semmel, Melvyn I. (*Nassau County Special Services School, Westbury, N.Y.*)

Teacher attitudes and information pertaining to mental

deficiency; a comparison of regular grade and special class teacher responses to an attitude-information questionnaire. *Am. J. Mental Deficiency*. Jan., 1959. 63:4:566-574.

A report of a study to identify areas of greatest and least amount of information possessed by the respective teacher samples. The relationship between having correct information concerning mental deficiency and positive attitudes toward the retarded was also investigated. Results of the study question the hypothesis that possession of correct information on mental deficiency will result in greater positive attitudes. Special teachers showed significantly greater knowledge of mental deficiency than regular teachers but both groups showed an equally high positive attitude score. Inconsistencies revealed in results could not be interpreted.

MENTAL DEFECTIVES—SURVEYS

247. Kirk, Samuel A. (*Coll. of Educ., Univ. of Illinois, Urbana, Ill.*)

The Onondaga census; fact or artifact, by Samuel A. Kirk and Bluma B. Weiner. *Exceptional Children*. Jan., 1959. 25:5:226-228, 230-231.

Close examination of findings of the Census of Referred Suspected Mental Retardation conducted in 1953 in Onondaga County, N.Y., by the Mental Health Research Unit, New York State Department of Mental Hygiene, reveals misconceptions it has produced. An over-inclusive definition of mental retardation distorted results; the definition as given resulted in referrals of educationally retarded children. A similar study in Hawaii, which differentiated between mental retardation and educational retardation, did not report similar results. Because the Onondaga study has been so widely cited, the authors point out that it is essentially a study of "referred educational retardation" rather than mental retardation.

MENTAL DISEASE—GREAT BRITAIN

248. Briggs, Dennie Lynn

Social psychiatry in Great Britain. *Am. J. Nursing*. Feb., 1959. 59:2:215-220.

The concept of the "therapeutic community" as observed in several mental hospitals in Great Britain greatly impressed the author, an American psychologist. Currently an ever-increasing emphasis on social factors contributing to mental illness and their use in treatment is evident in England. Trends in social psychiatry in English hospitals are described as well as newly developed methods used in care and treatment. Their implications for American psychiatry are considered.

MENTAL DISEASE—EMPLOYMENT

249. Connors, J. Edward (*V.A. Hosp., Brockton, Mass.*)

Member-employee follow-up and implications for rehabilitation of the psychiatric patient, by J. Edward Connors and Reuben J. Margolin. *Personnel and Guidance J.* Jan., 1959. 37:5:369-374.

Employment in the hospital under the Member-Employee Program at the Brockton, Mass., V.A. Hospital has resulted in eventual discharge into the community of psychiatric patients. This paper describes observations and experiences during four years' operation of the program, findings that have implications for the rehabilitation of

such patients, and the evident need for continuous follow-up of patients working in the community. The follow-up should go beyond referral of the individual to an agency for placement. Posthospital adjustment is dependent in many cases on continuity of the relationship between the discharged member-employee and the member-employee supervisor in the hospital. Technics for effecting a co-operative relationship between the supervisor and the employer of the discharged patient are discussed. Mental hospitals will find their responsibilities extending beyond the limits of the institution and into the community.

Earlier articles describing the Member-Employee plan were annotated in *Rehab. Lit.*, Feb., 1957, #218; Feb., 1956, #200; and Dec., 1955, #1274.

MONGOLISM—PSYCHOLOGICAL TESTS

250. Cantor, Gordon N. (*George Peabody Coll. for Teachers, Nashville, Tenn.*)

Rhythmic discrimination ability in mongoloid and normal children, by Gordon N. Cantor and Frederic L. Girardeau. *Am. J. Mental Deficiency*. Jan., 1959. 63:4:621-625.

References in the literature to the "marked sense of rhythm" in mongoloids have been generalizations based on subjective judgments. The present study compared the performance of mongoloids with that of normal preschool children in distinguishing between sounds produced by metronomes beating at two different rates. It seemed reasonable to assume that the individual with "marked sense of rhythm" would achieve at a higher level of proficiency. Both groups did significantly better than would be expected by chance, but the mongoloids' performance was significantly inferior to that of normal children. Results seemingly indicate that the trainable mongoloid cannot be said to be characterized by a "marked" sense of rhythm. Findings must be interpreted, however, in the light of the fact that the normal group had an M.A. level significantly above that of the mongoloid group.

MUSIC THERAPY

251. Rosé, A. E. (*Westminster Hosp., London, Ont., Canada*)

Music therapy at Westminster Hospital, by A. E. Rosé, C. E. Brawn, and E. V. Metcalfe. *Mental Hygiene*. Jan., 1959. 43:1:93-104.

A brief survey of literature on the therapeutic use of music with a short classification of the main uses, followed by a description of the authors' experiences with institutionalized psychiatric patients. Music was used to stimulate discussion of moods and experiences among patients meeting as a group. After an initial trial, the weekly session was changed to twice weekly. Administrative aspects of the program, choice of music, procedures of the meetings, and reactions of patients are discussed. Experience with the program suggests that the most effective participation is obtained with groups of from 6 to 12 patients. Critical and objective observations may provide more insight into the dynamics of the situation.

252. Weigl, Vally (*Clinic for Mentally Retarded Children, 5th Ave. at 105th St., New York, N.Y.*)

Functional music, a therapeutic tool in working with the mentally retarded. *Am. J. Mental Deficiency*. Jan., 1959. 63:4:672-678.

ABSTRACTS

"Functional music" is described as music used not for any esthetic value but for its effectiveness in reaching practical therapeutic goals outside music. Experience with music therapy in the Clinic for Mentally Retarded Children, New York City, has shown that about 70 percent of the children participating have exhibited positive changes in behavior and attitudes. Most important results have been on social and emotional levels, but improvement in posture, muscular control, rhythmic coordination, and speech have also been gratifying. In the author's opinion activities in functional music should not be limited to one session a week but there should be more frequent regular sessions integrated with rehabilitation programs in institutions, schools, hospitals, and the home. Three case studies are included.

NEUROLOGY

253. White, Robert J. (*Mayo Clinic, Rochester, Minn.*)

Cranial nerve function following total cerebral hemispherectomy in the monkey (*Macaca rhesus*), by Robert J. White and Collin S. MacCarty. *Proc., Staff Meetings Mayo Clinic*. Jan. 7, 1959. 34:1:22-29.

Describes a safe surgical method for removing the entire cerebral hemisphere from the primate brain; all cortical and subcortical systems above the midbrain level were removed except for the hypothalamus and its attendant structures, which were purposely preserved. The present report discusses observations on neurological recovery and function of the cranial nerves after total hemispherectomy. Subcortical regions remaining have not been completely eliminated as a source of motor activity or sensory appreciation in the hemispherectomized monkey, but the authors feel that, considering the degree of attainment and coordination of cranial-nerve function seen after hemispherectomy, cortical influences seem implicated primarily. Added weight is given this view by the mass of experimental evidence from primates (including man) of the bilaterality of motor innervation and sensory reception.

See also 282.

NUTRITION

See 211.

OLD AGE—PROGRAMS

254. Leavitt, Lewis A. (*2002 Holcombe Blvd., Houston 21, Tex.*)

Geriatric research and rehabilitation. *Am. Arch. Rehab. Therapy*. Dec., 1958. 6:4:29-33.

Research being conducted in the field of geriatrics by the V. A. hospital program is revealing problems in the care and rehabilitation of older patients. It is suggested that further study of clinical problems of the patient, the general biology of the aging process, the physiological and psychological aspects of aging, socioeconomic problems, and the role of the community in meeting the needs of aging persons would be fruitful areas of research and could result in improved services for the geriatric patient. From the standpoint of economics, rehabilitation of the older person is of vital importance.

PARALYSIS AGITANS—SPEECH CORRECTION

See 197.

PARAPLEGIA

See 279; 281; 283.

PARTIALLY SIGHTED—EMPLOYMENT

255. Giblin, Ruth E. (*Memorial High School, Roxbury, Mass.*)

Vocational guidance for the partially seeing. *Sight-Saving Rev.* Winter, 1958. 28:4:224-228.

Special facilities provided by the Boston public school department for visually handicapped high school students have existed since 1949. The author made a follow-up study of graduates of the program to determine their adjustment in the business world. Types of work engaged in by graduates and their experiences in obtaining employment indicate their need for special vocational guidance and opportunity. Community cooperation is needed if suitable work is to be made available for young people with visual handicaps.

PARTIALLY SIGHTED—SPECIAL EDUCATION

256. Oregon. State Department of Education. Special Education Section

Understanding the needs of the partially seeing child; summary of proceedings, tenth annual In-Service Conference on Exceptional Children... May 23-24, 1958. Salem, The Dept., 1958. 64 p.

Contains addresses and panel discussions presented at general sessions of the Conference.

Contents: Providing an education for partially seeing children, Evelyn E. Eisnaugle.—Teaching the partially seeing child, Constantine Bricca and Katie Sibert.—Understanding the partially seeing child, Evelyn E. Eisnaugle, Katie Sibert, and C. R. Bricca, Jr.—Panel discussion and summary, Madge Leslie (and others).

Discussed were community screening programs for the detection of visual defects, special educational techniques and equipment for the partially seeing, types of special education programs for this group, medical aspects of visual defects necessary for their understanding, how teaching methods can be adapted to needs of the partially seeing, and problems of school placement.

PHYSICAL EFFICIENCY

257. Benjamin Rose Hospital, Cleveland (*Dr. Chinn, Dept. of Preventive Med., Western Reserve Univ. School of Med., Cleveland, Ohio*)

Multidisciplinary studies of illness in aged persons: II. A new classification of functional status in activities of daily living. *J. Chronic Diseases*. Jan., 1959. 9:1:55-62.

Principal investigators: Sidney Katz and Austin B. Chinn.

Reports part of a continuing investigation conducted at a hospital for patients with long-term illness. An earlier report (see *Rehab. Lit.*, June, 1958, #654) described methods established for classifying patients and for evaluating functional status at various times during the course of chronic illness. The current paper defines an Index of Independence in Activities of Daily Living, which is newly evolved and more specific than any previously available. Examples of its use as a measure of the course of illness are presented. Progressive loss of abilities and progressive increase in the death rate of aged patients are evaluated;

the significance of application of the Index is discussed. Methods were originally designed in relation to fractures of the hip.

PLAY THERAPY

258. Subotnik, Leo (*Des Moines Still Coll. of Osteopathy and Surgery, Des Moines, Iowa*)

A pilot study in short-term play therapy with institutionalized educable mentally retarded boys, by Leo Subotnik and Roger J. Callahan. *Am. J. Mental Deficiency*. Jan., 1959. 63:4:730-735.

A report of a pilot study to determine the effectiveness of short-term play therapy with educable retarded children and the value of particular tests in determining effectiveness. After consideration of the data obtained, the authors suggest the need for more careful formulation of goals of therapy before evaluation of effectiveness is attempted. There was nothing in this study to suggest that the type of short-term play therapy schedule used may generally be expected to result in measurable improvement in institutionalized educable retarded boys.

POLIOMYELITIS—MEDICAL TREATMENT

See 229.

POLIOMYELITIS—MENTAL HYGIENE

259. Mendelson, Jack (*Massachusetts Gen. Hosp., Boston 14, Mass.*)

Hallucinations of poliomyelitis patients during treatment in a respirator, by Jack Mendelson, Philip Solomon, and Erich Lindemann. *J. Nerv. and Mental Dis.* May-June, 1958. 126:5:421-428.

This paper is not intended as a comprehensive review of the phenomena of hallucinations; observations in one special type of patient are recorded in an effort to understand their nature in the light of psychodynamic psychology and recent neurophysiological developments in the area of sensory deprivation. Eight patients with poliomyelitis treated in tank-type respirators exhibited hallucinatory phenomena having auditory, visual, tactile, kinesthetic, and in one case olfactory and gustatory components. Many experiences appeared to represent a denial of reality with a superficial strong wish-fulfillment component. Such hallucinations could be interpreted as a protective anticipatory device for supporting the ego in possible future stress situations.

PSYCHIATRY

260. Ripley, Herbert S. (*Dept. of Psychiatry, Univ. of Washington Med. School, Seattle, Wash.*)

Understanding emotional reactions to disability. *Phys. Therapy Rev.* Jan., 1959. 39:1:13-23.

Includes three case history presentations by Martin O. Mundale, Ruth Cook, and M. Genevieve Blakeley and Marcia G. Shaw.

Personality reactions in the disabled will vary according to the patient's inner resources and resources in the environment with which he has to work. Behavior patterns are strongly influenced by previous personality makeup. Dr. Ripley describes emotional reactions common to persons with various types of disability; these may influence functioning of the whole body. Because the therapist-

patient relationship is basic in any therapy, the author discusses ways in which the therapist can cope with specific problems to help the patient make constructive changes in his handling of situations. In treating those with muscular disability, it is important that members of the rehabilitation team have a knowledge of human reactions and the role they play in the patient's illness. Three case histories that follow Dr. Ripley's paper were presented for his comments on the psychology responsible for each patient's particular reaction to treatment and eventual adjustment.

PSYCHOLOGICAL TESTS

261. Vernier, Claire M. (*V.A. Hosp., 3900 Loch Raven Blvd., Baltimore 18, Md.*)

A factor analysis of indices from four projective techniques associated with four different types of physical pathology, by Claire M. Vernier, John W. Stafford, and Arnold D. Krugman. *J. Consulting Psych.* Dec., 1958. 22:6:433-437.

The analysis represents a partial approach to two clinical problems: (1) statistical validation of relationships among specific projective test scores, and (2) measurement of relationships between psychological variables and different types of medically diagnosed physical pathologies. Both problems arose from the need for a set of rigidly definable and defensible bases for the identification of specific test variables to be used in comparison of significant psychological differences between two groups of equally physically handicapped male veterans. Results of the analysis would seem to indicate partial validation for some of the clinical interpretations made from selected projective test variables and to support the hypothesis that personality factors are not associated with specific types of physical disease.

262. Witsaman, L. R. (*R.R. #5, Box 30, Logansport, Ind.*)

Reliability of the Columbia Mental Maturity Scale with kindergarten pupils, by L. R. Witsaman and Reginald L. Jones. *J. Clinical Psych.* Jan., 1959. 15:1:66-68.

Presents results of a study of the test-retest reliability of the Columbia Mental Maturity Scale for children within the age range of kindergarten pupils. The test was administered to 391 children ranging in age from five years, four months, to seven years, two months; a randomly selected group of 34 pupils chosen from the original group was retested. Analysis of results indicated the low test-retest validity of the Scale; validity is questioned especially in the five-year-old group. The authors concluded that the test requires study and standardization before it can be used with confidence.

PSYCHOLOGY

263. Spitz, Herman H. (*Edward R. Johnstone Training and Research Center, Bordentown, N.J.*)

Cortical satiation as a common factor in perception and abstraction; some postulated relationships based on the performance of atypical groups. *Am. J. Mental Deficiency*. Jan., 1959. 63:4:633-638.

In agreement with Dr. Benoit's belief that educational research with the mentally retarded could proceed from Hebb's neurological theory (see #230, this issue of *Rehab. Lit.*), this paper reviews recent research specifically derived

ABSTRACTS

from the Kohler-Wallach theory of cortical satiation. Based on this theory, research has led to the theoretical proposal of a unitary property inherent in such seemingly diverse areas as perception and verbal abstraction. The proposition is based on the assumption that cortical satiation is one measure of the figure-ground process. Speed, degree, and persistence of cortical satiation depends, to a large extent, on degree of modifiability of the brain field, which, in turn, depends on the state of the entire organ. The present discussion contends that the neurological condition of limited cortical modifiability, resulting in lowered capacity to satiate, is one of the primary factors responsible for poor performance of retardates on both perceptual and conceptual tasks.

READING

264. Harrison, E. M. (*Johannesburg School and Treatment Centre for Cerebral Palsied Children, Johannesburg, S. Africa*)

Teaching reading to the cerebral palsied child. *J. S. African Logopedic Soc.* Dec., 1958. 5:2:3-6.

Contributory factors that cause lack of "reading readiness" in cerebral palsied children are listed and activities suggested for the development of perception in these children at the nursery school and kindergarten level. Training in visual and auditory discrimination and spatial concepts leads to reading readiness. Positive results of the program evolved at the Johannesburg School and Treatment Centre have been encouraging.

See also 228.

REHABILITATION

See 183.

REHABILITATION—JAPAN

265. Japan Church World Service

Welfare work for the physically handicapped in Japan. Tokyo, The Service, c1958. 98, xii p. illus.

A comprehensive account of the current status of the physically handicapped in Japan and various welfare programs being conducted for their benefit. In addition to a review of the historical background of welfare work for the handicapped in Japan, data are included from a general survey of the blind, the deaf, crippled adults, the war-injured and civilian handicapped, and crippled children. Social legislation and agencies working for the physically handicapped are discussed as well as medical and ancillary services provided for rehabilitation. Additional information of interest is a list of well-known physically handicapped Japanese and their contributions to society and culture. Also lists rehabilitation centers, sheltered workshops, vocational training centers, hospital schools, and homes for crippled children in Japan.

Available from International Society for the Welfare of Cripples, 701 First Ave., New York 17, N.Y., at \$1.00 a copy.

REHABILITATION—TENNESSEE

266. Nemours Foundation (P.O. Box 269, Wilmington 99, Dela.)

The second Tennessee Conference on Handicapped Children, sponsored by the . . . coordinated by the Junior

League of Memphis, March 7-8, 1958. . . Wilmington, Dela., The Foundation, 1958. 133 p.

Proceedings of the Conference include featured addresses and reports of panel discussions of methods employed in Tennessee and other states to meet the needs of handicapped children, areas of responsibility of state-wide agencies interested in programs of aid to handicapped children, and recommendations for specific methods of implementing and extending services in Tennessee.

Speakers and the subjects of their addresses were: Planning for the handicapped children in Tennessee, C. Howard Bozeman.—Report on the Tennessee Coordinating Council for Handicapped Children, Randolph Batson.—The citizens of Iowa and their handicapped children, Raymond R. Rembolt.—The private voluntary agency and the handicapped child, Dean W. Roberts.—What the handicapped child has done for the doctor, Eric Denhoff.—The government agency and the handicapped child, Alice D. Chenoweth.

REHABILITATION—

STUDY UNITS AND COURSES

267. San Francisco State College. Orientation Training Institute (for New Rehabilitation Counselors)

Proceedings . . . June 8, 1958 through June 14, 1958. San Francisco, The College, 1958. 93 p. Mimeo. Loose-leaf.

Proceedings of the Institute, the third of its kind held at San Francisco State College, emphasize identification of the rehabilitation counselor as a member of the team serving the handicapped individual. Consideration was given appropriate vocational assessment and evaluation of the severely handicapped, the development of a wider range of competitive employment opportunities for the handicapped, expansion of existing workshops and their services, and professional graduate training germane to counseling in rehabilitation settings. Newer assessment technics growing out of experimental research sponsored by the Office of Vocational Rehabilitation were explored. Psychological aspects of physical disability and a need for clear understanding of a counseling approach to the handicapped were also discussed. Background information on implications of cardiovascular diseases and neurological and orthopedic disabilities in relation to vocational rehabilitation was included.

Available from Dr. William M. Usdane, San Francisco State College, 1600 Holloway Ave., San Francisco 27, Calif.

REHABILITATION—SURVEYS—MINNESOTA

268. Minnesota. University. Industrial Relations Center

Minnesota studies in vocational rehabilitation. Minneapolis, The Center, 1958. 3 pts.

Contents: Part IV. A study of 1,637 DVR counselees, Carroll I. Stein (and others). 44 p. tabs. (*Bul.* 24, Nov., 1958).—Part V. Methodological problems in rehabilitation research, Rene V. Dawis (and others). 32 p. tabs. (*Bul.* 25, Dec., 1958).—Part VI. A survey of the physically handicapped in Minnesota, George W. England (and others). 57 p. figs., tabs. (*Bul.* 26, Dec., 1958)

The Industrial Relations Center is engaged in a long-range study of vocational rehabilitation; one research

project planned is a pilot study of job placement procedures used with the physically handicapped. Part IV, an analysis of data on the counselee population served by two district offices of the State Division of Vocational Rehabilitation, gives a detailed breakdown of the characteristics of 1,637 counselees who had completed their rehabilitation program and were placed in employment during a five-year period. A comparison is made of the ease or difficulty of rehabilitation in various disability groups.

Part V describes how survey methods and procedures were developed and tested previous to their use in a state-wide survey of the physically handicapped in Minnesota. Results and comparisons of effectiveness are discussed. Questionnaire forms are included in the appendix.

Part VI, digested in this issue of *Rehab. Lit.* (see #190), reports results of the state-wide survey of the physically handicapped.

(Earlier pamphlets in this series are annotated in *Rehab. Lit.*, Dec., 1958, #1300)

Single copies of each of these bulletins available from the Industrial Relations Center, University of Minnesota, Minneapolis 14, Minn.

REHABILITATION CENTERS

269. Wallace, Helen M. (*School of Public Health, Univ. of Minnesota, Minneapolis 14, Minn.*)

Factors to be considered in planning a rehabilitation service, by Helen M. Wallace and Frederic J. Kottke. *J. Am. Med. Assn.* Dec. 27, 1958. 168:17:2253-2257.

Functions a rehabilitation service might reasonably be expected to carry out, advantages of locating the rehabilitation service in the general hospital, types of patients to be served, staff requirements, and program areas of significance are discussed. After care of the discharged patient and vocational services are necessary for total rehabilitation. Cooperation between rehabilitation services and other community agencies can improve the quality of the rehabilitation program.

REHABILITATION CENTERS—DIRECTORIES

See 187.

REHABILITATION CENTERS—LEGISLATION

270. Williams, Harold N.

How to obtain new facilities for your agency through the Hill-Burton Act. *Hearing News.* Jan., 1959. 27:1:13-14, 18-20.

Agencies interested in the possibilities of receiving funds under the Hill-Burton Act for the purpose of setting up new facilities for speech and hearing centers will find this article informative. General aspects of the legislation and procedures to be followed in obtaining funds on a matching basis are discussed. Under amendments to the Act, rehabilitation facilities, eligible under the original program only as a part of a hospital, can now be constructed as separate institutions. Terms defining such facilities are included. The application form and a completed "project narrative" accompanying the application supply the necessary information on administration, financing, and staffing of the proposed program, as well as a description of the proposed building. A chart form for the reporting of medical, psychological, and vocational services

in a rehabilitation facility, especially those serving the speech and hearing handicapped, is included.

RHEUMATIC FEVER—STATISTICS

271. Rosenfield, A. B. (*Minnesota State Dept. of Health, Univ. of Minnesota, Minneapolis 14, Minn.*)

Children with rheumatic fever in Minnesota. *Am. J. Public Health.* Dec., 1958. 48:12:1596-1601.

Data obtained from a questionnaire survey of Minnesota physicians in 1955 revealed a much higher incidence of rheumatic fever than is indicated by figures reported to the State Health Department. To test the accuracy of the data, a follow-up study of 11 percent of the medical records of physicians reporting showed that 80 percent of cases reported represented identifiable cases of rheumatic fever. Only 10 percent of these cases failed to meet Jones' criteria for true cases of rheumatic fever. Findings then would indicate that rheumatic fever continues to be prevalent and constitutes a serious problem in children. Implications for control and prevention of the disease are discussed.

RUBELLA

272. Blattner, Russell J. (*Baylor Univ. Coll. of Med., 1200 M. D. Anderson Blvd., Houston 5, Texas*)

Rubella during pregnancy. *J. Pediatrics.* Feb., 1959. 54:2:257-260.

A review of current literature on the relationship between rubella in pregnancy and the incidence of congenital defects. In spite of this re-evaluation of the incidence of fetal damage, the problem remains difficult for the physician. Data from a statistical analysis by Dekaban and associates, published in 1958, indicate that the fetus is extremely susceptible to serious damage from rubella infection in the mother in the first five weeks of gestation. Indications for therapeutic abortion and for management in early pregnancy of the woman who has been exposed to the disease are discussed. General consensus at present is that, although the risk of congenital malformation after maternal rubella is less than earlier estimates would indicate, the risk is still real. Safe measures for active immunization, as yet undeveloped, seem to offer promising means of control.

See also 215.

SHELTERED WORKSHOPS

273. Rudd, J. L. (*V.A. Hosp., Brockton, Mass.*)

A work adjustment center in vocational rehabilitation, by J. L. Rudd and S. Norman Feingold. *Arch. Phys. Med. and Rehab.* Jan., 1959. 40:1:29-34.

A description of a type of workshop coming into prominence in the United States; when operated as part of community counseling and placement services, it is most useful in cases where work behavior cannot be assessed through other technics or when special aspects of the client's vocational activities must be observed and developed. The workshop described has a large number of patients who can be considered geriatric and/or psychotic, a type most difficult to rehabilitate and place. Admission policies, the role of the physician supervisor, counselor, and other team members, and rehabilitation methods are discussed.

See also 186; 192.

ABSTRACTS

SPECIAL EDUCATION—U.S.S.R.

274. Tenny, John W.

Special education in the USSR. *Mich. Educ. J.* Feb. 1, 1959. 36:11:270-271.

In same issue: Gifted child education in Russia, George A. Roeper. p. 272-273.

Two articles in a continuing series about Russian education written by Michigan educators who toured Russia in 1958 with the Comparative Education Society. Dr. Tenny of Wayne University's Department of Special Education discusses special education in the Soviet Union and how communistic ideology influences such programs. With the exception of some speech correction and programs in rural areas, handicapped children are taught in special schools; segregation in the school situation is the basic pattern. Services for children with various handicaps are described.

Rigidity of the 10-year public school system in Russia does not permit special attention to gifted children, Mr. Roeper observed. Creativity, originality, and independent thinking are not encouraged. In the physical and natural sciences and engineering, students have considerable freedom to develop capacities. There are also special schools for the highly gifted in art, music, and dancing, but on the whole what is done for gifted children in Russia is accomplished outside the regular classroom in what we would term clubs.

SPECIAL EDUCATION—ADMINISTRATION

275. Mullen, Frances A. (Rm. 210, 228 N. La Salle St., Chicago 1, Ill.)

Staffing special education in 34 large cities. *Exceptional Children*. Dec., 1958. 25:4:162-168, 182.

An abstract of data from a report prepared by the Bureau of Research of the Chicago Public Schools, showing pupil-teacher ratios and class sizes in 34 large cities. The survey was an attempt to arrive at some decision on the relative importance of classroom and auxiliary teachers in staffing special education facilities. Within the group of cities represented, a wide range in philosophies and practices was evident in use of the available teacher supply. Data reflect size of class for regular education and for groups of pupils with specific handicaps.

SPECIAL EDUCATION—LEGISLATION

276. Sasscer, Harrison (Natl. Educ. Assn., 1201 16th St., N.W., Washington 6, D.C.)

The Hill-Elliott Act and special education. *Exceptional Children*. Dec., 1958. 25:4:155-157, 161.

Provisions of the National Defense Education Act of 1958 (the Hill-Elliott Act) are outlined briefly; specific programs set up under the Act—the loan, fellowship, and guidance programs—will interest the teacher of exceptional children. Another program is intended to encourage the development of educational media such as educational television, teaching films, and recorded tapes. Those interested in further information concerning the Act should write directly to the U.S. Office of Education.

SPECIAL EDUCATION—PROGRAMS

277. Langerhans, Clara (Am. Found. for Overseas Blind, 22 W. 17th St., New York 11, N.Y.)

Special education in Central America and Mexico. *Exceptional Children*. Jan., 1959. 25:5:202-204, 220.

As field service counselor for the American Foundation for Overseas Blind, the author worked with the government of Panama, Costa Rica, Guatemala, and Mexico in 1957, assisting in the improvement of services to the blind. She gives her impressions of special education facilities and services in each country; lack of trained personnel hinders widespread provision of services. Parents' attitudes often are responsible for inability of the state to identify handicapped children. More attention has been given to special educational facilities for the blind, the deaf, and the mentally retarded, with earliest efforts backed by private citizens or the church. Only recently has the government accepted special education as its responsibility.

SPEECH CORRECTION

278. Hardy, William G. (Speech and Hearing Center, Johns Hopkins Hosp., Baltimore, Md.)

Atypical children with communicative disorders, by William G. Hardy and Miriam D. Pauls. *Children*. Jan.-Feb., 1959. 6:1:13-16.

With the number of multiple handicapped children increasing, clinical management of the atypical child with communication disorders has become more complex. Dr. Hardy discusses how various communicative disorders represent some sort of breakdown in sensory-motor continuum. Labeling children according to primary or secondary categories of handicap does not solve the problem. The various communicative confusions, Dr. Hardy believes, should be recognized and handled not as entities but as part of the total picture of multiple handicaps.

SPEECH CORRECTION—INSTITUTIONS

See 270.

SPINAL CORD—MEDICAL TREATMENT

279. White, James C. (Massachusetts Gen. Hosp., Boston 14, Mass.)

Injuries to the cervical cord; fundamental factors in treatment and rehabilitation. *J. Bone and Joint Surg.* Jan., 1959. 41-A:1:11-15.

An editorial discussing fundamental factors of treatment of injuries of the cervical portion of the spinal cord, considered essential since they mean the difference between survival and death or relatively brief survival as a hopeless cripple. Experience in military and civilian hospitals since World War II is in striking contrast to statistics on survival during World War I. The author points out how the quadriplegic can be protected in the critical early stage of the injury and how rehabilitation can be accomplished so the patient can lead a relatively useful life.

Other editorials on the cervical spine that appear in this issue: Fusion of the cervical spine, Robert A. Robinson, p. 1-6.—On spinal cord injuries, Edgar A. Kahn, p. 6-11.—Whiplash; an unacceptable medical term, David M. Bosworth, p. 16.

Additional articles concerning medical treatment of the cervical spine: The advantages of early spine fusion in the treatment of fracture-dislocation of the cervical spine, H. Francis Forsyth (and others), p. 17-36.—Total cervical-spine fusion for neck paralysis, Jacquelin Perry

and Vernon L. Nickel, p. 37-60.—Degenerative changes in the cervical spine, Z. B. Friedenberg (and others), p. 61-70.

STUTTERING

See 184.

SWIMMING

280. Connecticut Society for Crippled Children and Adults

Report of Third Institute on Swimming for the Physically Handicapped... April 12, 1958... Hartford, The Society, 1958. 23 p. (Recreation and camping dept. monograph ser. no. 4)

A brief review of the current status of recreation and swimming programs for the physically handicapped in Connecticut, with discussions of instructor-swimmer relationships, program planning and community relationships, teaching methods and technics, and basic principles to be considered in programs for the handicapped as they apply to swimming activities.

Available from Connecticut Society for Crippled Children and Adults, Camping and Recreation Dept., 740 Asylum Ave., Hartford 5, Conn., at 50¢ a copy.

TYPING

281. Ziskind, Alan (818 Harrison Ave., Boston 18, Mass.)

Remote control typewriter for paraplegics, by Alan Ziskind and Richard L. Ziskind. *J. Am. Med. Assn.* Jan. 31, 1959. 169:5:459-460.

Describes a control panel that allows the handicapped individual who has lost the use of his extremities to operate a typewriter at a speed and degree of accuracy comparable to that of a nonprofessional typist. The photoelectric cell panel board is coupled to a standard electric typewriter that prints the letters automatically when the parallel-beam light source strikes the target area of the panel board. The apparatus is best suited to persons who have lost the use of their extremities through injury or spinal cord disease; it has only limited applicability to the cerebral palsied or athetoid patient.

U. S. NATIONAL INSTITUTE OF NEUROLOGICAL DISEASES AND BLINDNESS—REPORTS

282. U. S. National Institutes of Health

Highlights of progress in research on neurological disorders, 1957. Washington, D.C., Govt. Print. Off., 1958. 16 p. (Public Health Serv. publ. no. 597)

A summary of clinical and basic research programs of the National Institute of Neurological Diseases and Blindness conducted in 1957, with important findings discussed in some detail. Diagnostic advances relating to eye disorders, major progress in surgical treatment of temporal lobe epilepsy, biochemical findings bearing on multiple sclerosis, progress in cerebral palsy and parkinsonism, basic research advances relating to regeneration of nerve tissue, improvement of a brain tumor detection device, use of a technic revealing knowledge of the fine structure and function of the central nervous system, and advances in knowl-

edge of the structure, function, and chemistry of the brain are among subjects covered briefly.

Available from U.S. Superintendent of Documents, Washington 25, D.C., at 15¢ a copy.

UROLOGY

283. Murphy, John J. (3400 Spruce St., Philadelphia 4, Pa.)

Urologic rehabilitation of the chronically disabled patient. *Pa. Med. J.* Jan., 1959. 62:1:61-66.

Proper management of the urinary tract in patients with chronic disability due to congenital defect, neurological disorders, and paraplegia is of prime importance in rehabilitation. Careful initial evaluation and management with patient guidance through recovery phases is best accomplished by a team of specialists working together in the rehabilitation center. Procedures in managing urinary tract difficulties are discussed in some detail.

VOCATIONAL EDUCATION—DIRECTORIES

See 187.

VOCATIONAL GUIDANCE

284. Routh, Thomas A. (Florida Council for the Blind, Tampa, Fla.)

Body image in counseling the handicapped. *Voc. Guidance Quart.* Winter, 1958. 7:2:127-130.

Any person incurring a disability becomes a different person psychologically from his former self; in most cases physical disability is the very least part of the person to be affected, in the author's opinion. He suggests technics whereby the counselor can aid the disabled client in recognition of the changes within himself. Lack of acceptance of the disability can block vocational rehabilitation. No vocational planning should be undertaken until these basic problems have been cleared up.

See also 186; 255; 267.

WORKMEN'S COMPENSATION—NEW YORK

285. New York. Moreland Act Commission to Study Workmen's Compensation

Costs, operations, and procedures under the Workmen's Compensation Law of the State of New York; second report to... Averell Harriman, Governor... by Joseph M. Callahan as Commissioner... December 29, 1958. New York, The Commission, 1958. 86 p. tabs.

The current report of the Moreland Act Commission should be read as a supplement to the first report (see *Rehab. Lit.*, Feb., 1958, #238). Detailed comparisons of various workmen's compensation systems, their administration, and the supervision of medical care in four jurisdictions are made in the current report. Recommendations regarding changes in the rate-making process are made in the light of current findings. Appendixes contain data brought up to date since the first report; information is based on experience with workmen's compensation cases in New York State. Medical aspects of the Ontario (Canada) compensation system are also discussed in some detail.

Available from the Moreland Act Commission, 33 Rector St., New York 6, N.Y.

Legislative Report

on the 86th Congress

As of the close of Congressional activity on February 9, 1959, almost 6,000 bills and resolutions had been introduced, 1,153 in the Senate and 4,792 in the House. Many House bills are identical or similar in their wording since each carries the name of only one Representative; and some are the so-called perennials on which little or no action can be expected. A general run-down covering that portion of this tremendous activity that bears most closely on activities affecting the rehabilitation of the physically handicapped is presented here.

For the purposes of this report, bill numbers have been taken from the House, although many identical or similar measures have been introduced in the Senate. Generally, only one bill number has been used to identify a measure, even though in some instances many more bills seek to accomplish the same purpose.

Training of Teachers of Exceptional Children

On January 7, 1959, Congresswoman Sullivan introduced H.R. 12, the "Exceptional Children's Educational Assistance Act." The bill would provide scholarships and fellowships to individuals and grants to institutions of higher education, to encourage and expand the training of teachers for the education of exceptional children. The introduction of this bill is in keeping with Congresswoman Sullivan's expressed intent at the close of the 85th Congress to introduce a measure that would provide for teachers of all exceptional children benefits similar to those provided by the 85th Congress in Public Law 85-926 for the teachers of the mentally retarded. This bill has been referred to the Committee on Education and Labor.

The Keogh Bill (Special Tax Exemptions for the Disabled)

During the 85th Congress Mr. Keogh introduced a bill that in the case of a disabled individual would provide deductions for income tax purposes for expenses for transportation to and from work and an additional exemption for income tax purposes for the taxpayer or spouse who is physically or mentally incapable of caring for himself. Mr. Keogh has reintroduced this bill, which carries the number H.R. 134, and it has been referred to the Committee on Ways and Means.

Additional Tax Exemptions for the Disabled

A number of bills seeking tax relief for additional expenses incurred because of disability have been introduced. Among them are those that would provide an additional exemption to a taxpayer supporting a dependent who is blind or otherwise permanently and totally disabled (H.R. 40); permit deduction for certain transportation expenses (H.R. 476); increase the amount a taxpayer may deduct on account of expenses paid for the care of his/her dependents (H.R. 413); provide an additional personal exemption for the taxpayer if his/her spouse is permanently and totally disabled (H.R. 337); provide an additional income tax exemption for a taxpayer supporting a child who is an invalid (H.R. 2422); and provide that special equipment for disabled individuals shall not be subject to the tax on automobile parts and accessories (H.R. 2399). These bills have been referred to the Committee on Ways and Means.

Independent Living Rehabilitation Bill

Bills introduced by Representative Elliott (H.R. 361) and Representative Fogarty (H.R. 1119) would provide evaluation of rehabilitation potentials and rehabilitation services to handicapped individuals who as a result thereof could achieve independence in caring for their own daily needs. The bills also would assist in the establishment of public and private nonprofit workshops and rehabilitation facilities. These bills are the same as those that had been introduced in the 85th Congress. The bills have been referred to the Committee on Education and Labor.

Miscellaneous Rehabilitation Bills

Listed below are a number of bills that show an interest in the activities of the handicapped:

H.R. 698, to increase the benefits for paraplegics provided under the Federal Employees Compensation Act.

H.R. 1104, to amend the Vocational Rehabilitation Act to provide additional federal support to states and certain nongovernmental agencies to enable them to carry out adequate demonstration programs for the vocational rehabilitation of the homebound.

H.R. 1148, to amend the Vocational Rehabilitation Act to

provide additional federal support to states and certain nongovernmental agencies to enable them to carry out adequate demonstration programs for the vocational rehabilitation of the physically handicapped.

H.J. Resolution 44, to designate the Saturday before Palm Sunday in each year as Crippled Children's Day.

H.R. 1775, to amend the Federal Property and Administrative Services Act of 1949 to make rehabilitation facilities and sheltered workshops eligible for donations of surplus real and personal property.

International Medical Research

On January 12, Representative Fogarty introduced House Joint Resolution 129, which provides for the establishment of a National Advisory Council for International Medical Research and the establishment of a National Institute for International Medical Research. This measure had been introduced in both the Senate and the House in the closing days of the 85th Congress. Senator Hill has introduced a similar resolution (S.J. Res. 41) in the Senate and is expected to work for its passage. The Senate Committee on Government Operations is preparing a report on matters pertaining to international research in health, rehabilitation, and assistance. The report should provide considerable background information for definitive action on the resolution, which is currently couched in broad terms. The House Joint Resolution has been referred to the Committee on Interstate and Foreign Commerce and the Senate Joint Resolution to the Committee on Labor and Public Welfare.

Amendment of the Social Security Act

A substantial number of bills have been introduced to amend the Social Security Act. Among changes that would affect the disabled are the following:

H.R. 412, to provide insurance against the cost of hospitalization for insured disabled persons.

H.R. 107, to eliminate the requirement that an individual must have attained the age of 50 in order to become entitled to disability insurance.

H.R. 2863, to permit an individual to qualify for the disability freeze with 40 quarters of coverage, regardless of when such quarters occurred.

These bills have been referred to the Committee on Ways and Means.

Construction (Hill-Burton and other programs)

The President has expressed the policy of the administration to use federal construction and support of non-federal construction as antirecession measures and to defer such construction to the less prosperous years. The budget reflects this policy by asking for \$101.2 million for the Hill-Burton program as opposed to \$186.2 million of this year. Requests for grants for other health research facilities were cut from \$30 million to \$20 million. Among the bills encouraging construction are the following:

H.R. 85, to encourage the construction of diagnostic or treatment centers in rural areas.

H.R. 1944, to extend the period during which loans and grants may be made for the construction of hospitals under the Defense Housing and Community Facilities and Services Act of 1951, etc.

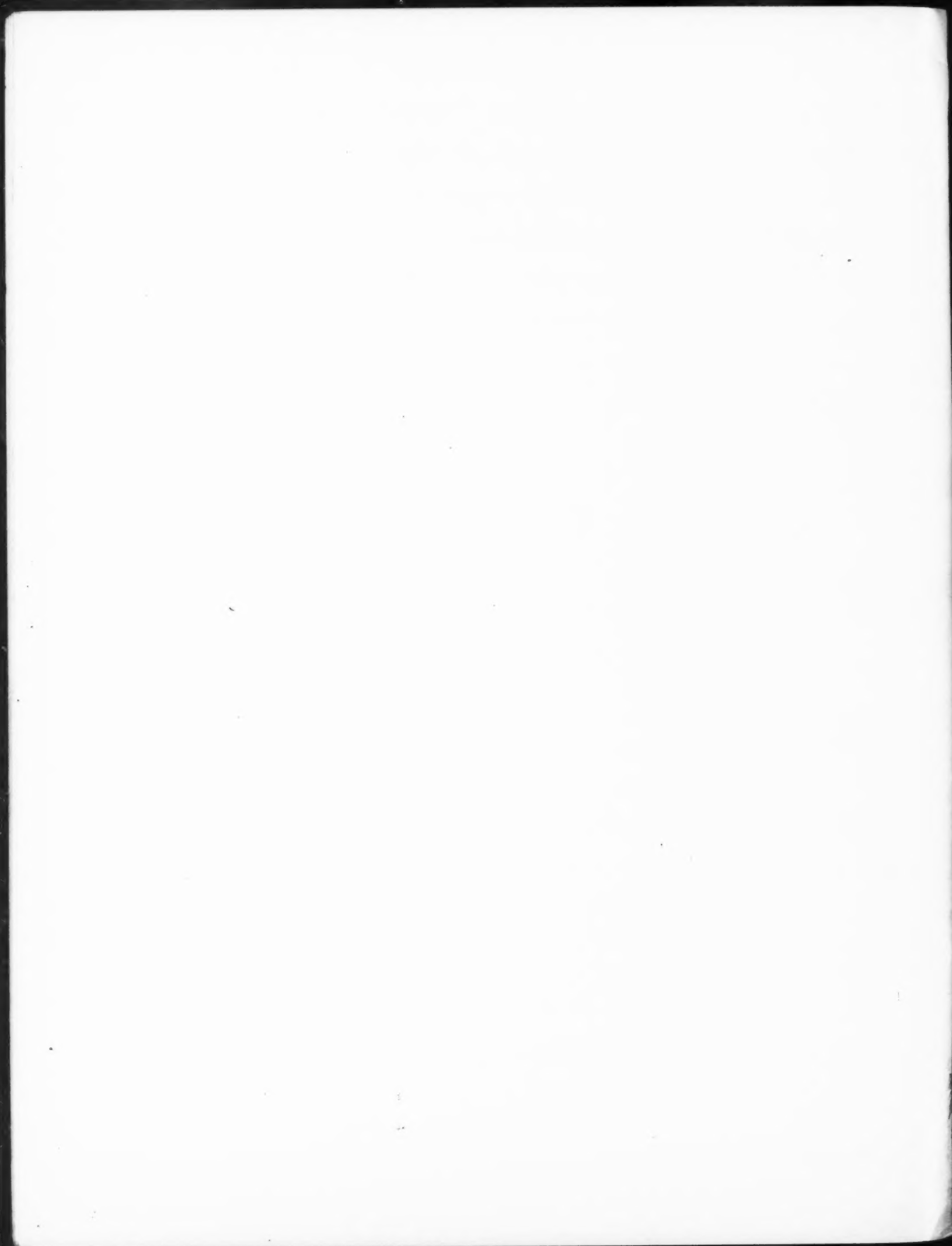
The President, in his budget message, indicated that a study was being conducted by the Department of Health, Education, and Welfare on long-term objectives in the field of medical research and training, and the study, which would cover terms of program and costs, including indirect costs, would be made available to Congress later.

Scholarships and Fellowships

In his budget message the President brought out the fact that the future of health programs depended on an adequate supply of qualified personnel and indicated that legislation was being recommended to extend programs that would expire on June 30, 1959, for training of professional nurses and for graduate training of public health personnel. In addition to the bill providing scholarships for teachers of exceptional children, bills have been introduced to amend the National Defense Education Act of 1958 to provide scholarships (*H.R. 284* and *H.R. 1112*) and to encourage education and training in the field of nursing (*H.R. 168* and *H.R. 1251*). The amendments to the National Defense Education Act have been referred to the Committee on Education and Labor, and those bills that would provide scholarships in the field of nursing have been referred to the Committee on Interstate and Foreign Commerce.

Federal Agency for the Handicapped

As in previous Congresses a number of bills have been introduced that would provide for the establishment of a federal agency for the handicapped. One such bill is *H.R. 122*.



Events and Comments

(Continued from page 77)

Bobaths to Give Course in South Africa

AT THE INVITATION OF THE Cape Province Cerebral Palsy Association, Dr. and Mrs. Karel Bobath will give a course in the treatment of cerebral palsy for physiotherapists, speech therapists, and occupational therapists in Rondebosch, South Africa. The course will be held at the Cape School for Cerebral Palsied Children from April 13 through June 5, 1959. If this, the first course of its type held in South Africa, proves successful, other experts will be brought from overseas to hold courses aimed at building up a team of experienced, qualified workers.

Research in Health

THE 1958 (SEVENTH) EDITION OF *An Inventory of Social and Economic Research in Health* has recently been published by the Health Information Foundation, 420 Lexington Ave., New York 17, N.Y. Reports on research projects covering various aspects of rehabilitation are included among the almost 800 entries indexed.

National Associations of the Disabled

MRS. JEANNE REYNOLDS, secretary-social worker of the Cape (South Africa) Cripple Care Association, observes that disabled persons in group association work well together and engender competitive spirit that diverts attention to abilities rather than disabilities. In the December, 1958, issue of *Cripple Care*, published by the National Council for the Care of Cripples in South Africa, she reports on the various national groups.

In Sweden the National Association of Cripples, with about 6,000 members, has taken charge of recreation for the disabled and has been working for the revision of pension regulations. In Belgium La Federation Nationale des Invalides du Travail et de Paix has about 25,000 members; it fights for the protection of the government, demanding more facilities for medical treatment and rehabilitative training, employment concessions, and a cost-of-living pension for the badly disabled. Also in Belgium are associations that sponsor Scout troops of handicapped youths and the "Amicale Belge des Paralysees," whose slogan is "Help me to act alone" and who meet monthly. In Finland organizations run by the disabled have established rehabilitative facilities and are entrusted by the government with job placement of the disabled. In France the Association des Paralysees de France, started in 1933, now has 15,000 disabled members. In the Union of South Africa the St. Giles Association has branches in Johannesburg, Durban, and Cape Town and performs vital services. Achievements include: weekly social evenings for handicapped Europeans;

an active remedial clinic for both Europeans and non-Europeans; diversional therapy for the homebound; a small stamp business for the seriously handicapped and homebound; organization of smaller clubs such as a girls' sewing club, a boys' club, and a poliomyelitis fellowship. Problems detected in such associations are immediately referred to a Cripple Care social worker.

Child Amputees

A NATIONAL PROGRAM aimed at helping amputees under 16 years of age is sponsored by the Prosthetic Research Board of New York University under the National Research Council. The program will promote the expansion of clinics for child amputees and stimulate progress in children's artificial limbs. Participating in the program are clinics in Durham, N.C.; Atlanta, Ga.; Birmingham, Ala.; Philadelphia, Pa.; Grand Rapids, Mich.; Buffalo, N.Y.; Los Angeles, Calif.; Chicago, Ill.; and New York City, N.Y.

After Colostomy or Ileostomy

VOLUNTARY ASSOCIATIONS in Philadelphia and Los Angeles offer two new publications for those who have had colostomy or ileostomy. *Colostomy-Ileostomy Guide*, available from the Colostomy-Ileostomy Rehabilitation Association, P.O. Box 121, Philadelphia 5, Pa., is the first of a planned series giving general information and specific suggestions for the specialized care necessitated by the operations.

Source and choice of appliances, their care, suggestions on eating habits, and details of personal hygiene are covered in *Ileostomy Information*, issued by the Ileostomy Association of Los Angeles, 6912 Hollywood Blvd., Rm. 305, Los Angeles, Calif. (available at 30¢ a copy, less in quantity orders).

Bibliography on Sheltered Workshops

THE JANUARY, 1959, ISSUE OF *Habilitation Review*, a publication of the Occupational Center of Essex County, 1111 S. Orange Ave., Newark 6, N.J., is devoted to a 9-page, mimeographed bibliography on sheltered workshop administration.

Heads Rehabilitation Training Program

DR. ISABEL PICK ROBINAULT was recently appointed Director of Professional Education and Training at the Institute for the Crippled and Disabled, New York, N.Y. Dr. Robinault will continue her activities at Columbia University's College of Physicians and Surgeons, where she is supervisor of postgraduate cerebral palsy courses and an instructor in occupational therapy.

Basic Professional Library for the Speech and Hearing Therapist

ONE HUNDRED BOOKS well recommended for the professional collection of the speech and hearing therapist have been selected by Morris Val Jones, Associate Professor, Illinois State Normal University, Normal, Ill. This, the fourth revision of the checklist, is available in mimeographed form from Dr. Jones.

Spanish Edition of Scouting for the Handicapped

PUBLISHED originally by the Association of Boy Scouts, with imperial headquarters in London, England, *Scouting for the Handicapped* is now available in a new Spanish edition. A joint project of the International Society for the Welfare of Cripples and the International Boy Scouts Association, *Tambien Son Scouts: Manual de Escultismo de Estension* was published in Havana, Cuba, by Editorial Scout Interamericana. Copies may be purchased from the ISWC, 701 First Ave., New York 17, N. Y.

Dr. Earl F. Hoerner Comments Feasible Rehabilitation Goals

"IT HAS BEEN FOUND on clinical evaluation that any one hundred persons needing (or referred for) rehabilitation services will fall into five distinct categories from a feasible, objective, therapeutic and vocational viewpoint. Twenty will be able to return to their previous employment without the need for special counseling or vocational training, and twenty will be able to return to gainful employment but will need selective placement or new vocational training. Of the remaining sixty persons, twelve will be able to perform only sheltered workshop type of occupational pursuits—with or without special training to prepare them for these vocational endeavors, and twelve will be confined to the home but able to follow through with vocational activities which will provide income and, in many cases, a form of economic security. The remaining group of thirty-six will not be able to undertake vocational activities of any nature but should be able to function, in most cases, in a better and more independent manner in the self-care areas by making care at home and nursing services less of an economic and physical strain on their families. In some instances this will allow another member of the family to return to gainful employment rather than to continue to provide the nursing services which a patient previously needed."—Earl F. Hoerner, M.D., Kessler Institute for Rehabilitation, "Rehabilitation," in *Long-Term Illness: Management of the Chronically Ill Patient*, edited by Michael G. Wohl, M.D., W. B. Saunders Company, Philadelphia, Pa. 1959.

REHABILITATION LITERATURE

Author Index

- Adelphi College, 191
 Affeldt, John E., 183
 Aitken, Alexander P., 183
 Anderson, Thomas P., 204
 Arthritis and Rheumatism Foundation,
 N.Y. State Chapter, 199
 Baird, Henry W., III, 218
 Barckley, Virginia, 194
 Batson, Randolph, 266
 Beeman, Alan, 242
 Bell, John F., 235
 Bender, Leonard F., 183
 Benjamin Rose Hospital, Cleveland, 257
 Bennett, R. L., 183
 Benoit, E. Paul, 230
 Bertelsen, Arne, 193
 Bishop, E. Beryl, 209
 Blackman, Leonard S., 243
 Blakeley, M. Genevieve, 260
 Blattner, Russell J., 272
 Bosworth, David M., 279
 Bower, Eli M., comp., 235
 Bozeman, C. Howard, 266
 Brandt, Sven, 189, 193
 Brawn, C. E., 251
 Bricca, C. R. Jr., 256
 Bricca, Constantine, 256
 Briggs, Dennie Lynn, 248
 British Paediatric Assn., 210
 Bruell, Jan H., 183
 Bullock, Donald H., 240
 Burks, Harold F., 235
 Callahan, Joseph M., 285
 Callahan, Roger J., 258
 Cantor, Gordon N., 250
 Canty, Thomas J., 193
 Carter, Waneta N., 223
 Chandler, Charles S., 227
 Chenoweth, Alice D., 266
 Chinn, Austin B., 257
 Coe, Myrtle H., 222
 Coe, Rodney M., 227
 Cohen, Nathan M., 187
 Connecticut Soc. for Crippled Children and
 Adults, 280
 Connecticut State Dept. of Health, 231
 Conners, J. Edward, 249
 Cook, Ruth, 260
 Corrie, Rosa, 222
 Costello, C. G., 207
 Creighton, Helen, 222
 Dawis, Rene V., 268
 Denhoff, Eric, p. 67, 266
 Dennis, Jeannine F., 196
 DePalma, Anthony F., ed., 183
 Diehl, Charles F., 184
 Doyle, Barbara, 214
 Doyle, T. J., 219
 Eisnaugle, Evelyn E., 256
 Elliott, Florence C., 222
 England, George W., 268
 Feingold, S. Norman, 273
 Ferguson, Robert G., 186
 Fisch, L., 215
 Forsyth, H. Francis, 279
 Foxen, E. H. Miles, 216
 Freidenberg, Z. B., 279
 Fuldner, Russell V., 183
 Furey, Charles A., 183
 Garrison, Mortimer, Jr., 241, 244
 Giblin, Ruth E., 255
 Gibson, Robert, 232
 Girardeau, Frederic L., 250
 Goldstein, Herbert, 237
 Goodrich, Martha, 211
 Gordon, Edward E., 200
 Groth, Hilde, 196
 Hardy, William G., 278
 Harrison, E. M., 264
 Hayden, Mary L., 205
 Hertig, A. T., 213
 Hirsch, Ernest A., 233
 Hirschberg, Gerald G., 183
 Hiyeda, Masatora, 193
 Hoberman, Shirley Gall, 197
 Hoerner, Earl F., 183
 Hoover, Roy M., 183
 Hormuth, Rudolph P., 235
 Hummel, Katherine P., 213
 Illingworth, R. S., p. 67
 Internatl. Soc. for the Welfare of Cripples.
 Comm. on Prostheses, Braces and Techni-
 cal Aids, 193
 Irwin, Orvis C., 208
 Jackson, A. D. M., 215
 Jansen, Knud, 193
 January, L. E., 221
 Japan Church World Service, 265
 Jolles, Isaac, 202
 Jones, Reginald L., 262
 Kahn, Edgar A., 279
 Kaliski, Lotte, 203
 Kalter, Harold, 213
 Katz, Sidney, 257
 Kessler, Henry H., 183
 Kirk, Samuel A., 247
 Klausmeier, Herbert J., 242
 Knapp, Miland E., 224
 Knowlton, G. C., 183
 Kohs, Samuel C., 235
 Korngold, Herbert, 235
 Kottke, Frederic J., 269
 Kramer, Yale, 228
 Kratter, Frederick E., 236
 Kristensen, K., 193
 Kroll, Frances, 199
 Krout, Robert M., 204
 Krugman, Arnold D., 261
 Langerhans, Clara, 277
 Law, C. W., 198
 Lindemann, Erich, 259
 Lineberger, Mildred I., 194
 Leavitt, Lewis A., 254
 Lehmann, Irvin J., 242
 Leslie, Madge, 256
 McBride, Earl D., 183
 MacCarty, Collin S., 253
 MacDonald Training Center, Tampa.
 Sheltered Workshop, 186
 Maline, David B., 240
 Margolin, Reuben J., 249
 Mendelson, Jack, 259
 Mennell, John McM., 183
 Metcalfe, E. V., 251
 Montan, Karl, 193
 Mullen, Frances A., 275
 Mundale, Martin O., 260
 Murphy, Eugene F., 193
 Murphy, John J., 283
 Murphy, M. Lois, 213
 Murray, R. J., 219
 Nelson, Nathan, 192
 Nemours Foundation, 266
 New York. Moreland Act Commission to
 Study Workmen's Compensation, 285
 Nickel, Vernon L., 279
 Oregon State Dept. of Education. Special
 Education Section, 256
 Parnicky, Joseph J., 245
 Patton, Catherine J., 194
 Pauls, Miriam D., 278
 Perrow, Charles, 226
 Perry, Jacquelin, 279
 Peszczynski, Mieczyslaw, 183
 Polani, Paul E., 206
 Rabkin, Richard, 228
 Rembolt, Raymond R., 266
 Ring, P. A., 229
 Ripley, Herbert S., 260
 Roberts, Dean W., 266
 Robertson, James, 188
 Robinault, Isabel P., 201
 Robinson, Robert A., 279
 Roeper, George A., 274
 Ronn, G., 193
 Rosé, A. E., 251
 Rosenberger, Josef, 183
 Rosenfield, A. B., 271
 Rothstein, Jerome, comp., 235
 Routh, Thomas A., 284
 Rudd, J. L., 273
 Runner, Meredith N., 213
 Rusale, Herbert, 217
 San Francisco State College. Orientation
 Training Institute, 267
 Sasscer, Harrison, 276
 Schull, William J., 213
 Schwartz, Doris, 211
 Semmel, Melvyn I., 246
 Shafter, Albert J., 227
 Shavell, Audrey, 198
 Shaw, Marcia G., 260
 Sibert, Katie, 256
 Skatvedt, Marit, 182
 Skeels, Harold, 235
 Slobody, Lawrence B., 234
 Smith, Lester A., 194
 Smith, Thomas W., 235
 Solomon, Philip, 259
 Spitz, Herman H., 243, 263
 Spitzer, Robert L., 228
 Stafford, John W., 261
 Stein, Carroll I., 268
 Stoddard, Hilda M., 239
 Stone, Nellie D., 245
 Subotnik, Leo, 258
 Tarjan, George, 235
 Taylor, C. L., 196
 Tenny, John W., 274
 Treanor, Walter J., 183
 U.S. Civil Service Commission, 220
 U.S. National Institutes of Health, 213, 282
 U.S. Public Health Service, 212
 University of California. Dept. of Engineer-
 ing, 196
 University of Minnesota. Industrial Rela-
 tions Center, 190, 268
 Utley, Marvin D., 238
 Vernier, Claire M., 261
 Wakim, Khalil G., 183
 Wallace, Helen M., 269
 Ware, E. Louise, 191
 Watkins, Arthur L., 195
 Weigl, Vally, 252
 Weiner, Bluma B., 247
 White, Bernard L., 245
 White, Dorothy W., 225
 White, James C., 279
 White, Robert J., 253
 Williams, Harold N., 270
 Wilson, A. Bennett, Jr., 193
 Windle, William F., ed., 185
 Witsaman, L. R., 262
 Wortis, Joseph, 235
 Ziskind, Alan, 281
 Ziskind, Richard L., 281